

**Supplement 2: TGFb Signature - significantly regulated genes upon 4h TGFb stimulation of HaCaT cells**

Illumina Identifier	HGNC gene symbol	Gene Description	Refseq ID	UT 4h	UT+TGFb 4h	LR +/- TGFb 4h	-log10 pVAL LR +/- TGFb 4h
ILMN_1744381	SERPINE1	serpin peptidase inhibitor, clade E (nexin, plasminogen activator inhibitor type 1), member 1 (SERPINE1), mRNA.	NM_000602.1	7.11	12.23	5.13	43.08
ILMN_1667295	VASN	vasorin (VASN), mRNA.	NM_138440.2	6.67	10.08	3.41	37.51
ILMN_2309156	PMEPA1	prostate transmembrane protein, androgen induced 1 (PMEPA1), transcript variant 2, mRNA.	NM_199169.1	8.78	12.16	3.38	36.26
ILMN_1776936	ANKRD38	ankyrin repeat domain 38 (ANKRD38), mRNA.	NM_181712.3	6.42	9.91	3.49	34.13
ILMN_1734276	PMEPA1	prostate transmembrane protein, androgen induced 1 (PMEPA1), transcript variant 2, mRNA.	NM_199169.1	9.72	13.18	3.46	33.82
ILMN_1721770	PAPPA	pregnancy-associated plasma protein A, pappalysin 1 (PAPPA), mRNA.	NM_002581.3	7.1	10.79	3.7	32.96
ILMN_1705750	TGM2	transglutaminase 2 (C polypeptide, protein-glutamine-gamma-glutamyltransferase) (TGM2), transcript variant 1, mRNA.	NM_004613.2	6.53	10.48	3.95	31.97
ILMN_1749414	MG4294	PREDICTED: hypothetical protein MG4294 (MG4294), misc RNA.	XR_017834.1	5.87	8.28	2.42	31.5
ILMN_1698929	CTGF	connective tissue growth factor (CTGF), mRNA.	NM_001901.1	6.89	10.36	3.46	30.21
ILMN_1713751	ADAM19	ADAM metalloproteinase domain 19 (meltrin beta) (ADAM19), transcript variant 2, mRNA.	NM_033274.2	8.43	11.84	3.41	30.1
ILMN_2115125	CTGF	connective tissue growth factor (CTGF), mRNA.	NM_001901.2	7.03	10.12	3.09	29.68
ILMN_1741847	MMP10	matrix metalloproteinase 10 (stromelysin 2) (MMP10), mRNA.	NM_002425.1	8.2	11.15	2.95	28.44
ILMN_1655595	SERPINE2	serpin peptidase inhibitor, clade E (nexin, plasminogen activator inhibitor type 1), member 2 (SERPINE2), mRNA.	NM_006216.2	12.65	14.53	1.88	27.98
ILMN_1769201	ELF3	E74-like factor 3 (ets domain transcription factor, epithelial-specific ) (ELF3), mRNA.	NM_004433.3	9.63	6.66	-2.97	26.98
ILMN_1651950	TPST1	tyrosylprotein sulfotransferase 1 (TPST1), mRNA.	NM_003596.2	7.91	9.87	1.96	26.95
ILMN_1705231	SLCO2A1	solute carrier organic anion transporter family, member 2A1 (SLCO2A1), mRNA.	NM_005630.1	7.58	10.29	2.71	26.81
ILMN_2399300	NAV2	neuron navigator 2 (NAV2), transcript variant 2, mRNA.	NM_145117.3	8.63	11.34	2.71	26.64
ILMN_1772824	WNT5B	wingless-type MMTV integration site family, member 5B (WNT5B), transcript variant 1, mRNA.	NM_032642.2	6.76	9.04	2.28	26.16
ILMN_1864372		BX097797 Soares pregnant uterus NbHPU cDNA clone IMAGp998N17164, mRNA sequence		7.34	10.15	2.8	25.66
ILMN_2203891	SMAD7	SMAD family member 7 (SMAD7), mRNA.	NM_005904.2	7.69	9.64	1.95	25.49
ILMN_1736190	CYP4F3	cytochrome P450, family 4, subfamily F, polypeptide 3 (CYP4F3), mRNA.	NM_000896.1	9.96	7.68	-2.28	24.41
ILMN_2376723	CDKN2B	cyclin-dependent kinase inhibitor 2B (p15, inhibits CDK4) (CDKN2B), transcript variant 2, mRNA.	NM_078487.2	9.58	11.88	2.3	24.25
ILMN_1797875	ALOX5AP	arachidonate 5-lipoxygenase-activating protein (ALOX5AP), mRNA.	NM_001629.2	5.89	8.11	2.22	23.7
ILMN_1712475	HS3ST2	heparan sulfate (glucosamine) 3-O-sulfotransferase 2 (HS3ST2), mRNA.	NM_006043.1	9.33	11.61	2.28	23.3
ILMN_2174711	C21orf129	chromosome 21 open reading frame 129 (C21orf129), mRNA.	NM_152506.1	8.77	6.81	-1.96	22.9
ILMN_1769391	MAMDC2	MAM domain containing 2 (MAMDC2), mRNA.	NM_153267.3	8.55	10.6	2.06	22.43
ILMN_1655740	SNAI2	snail homolog 2 (Drosophila) (SNAI2), mRNA.	NM_003068.3	9.13	11.17	2.03	22.43
ILMN_2188722	GLS	glutaminase (GLS), mRNA.	NM_014905.2	9.82	11.62	1.79	22.27
ILMN_1775380	SMOX	spermine oxidase (SMOX), transcript variant 4, mRNA.	NM_175842.1	9.37	11.01	1.64	22.27
ILMN_1766650	FOXA1	forkhead box A1 (FOXA1), mRNA.	NM_004496.2	11.81	9.51	-2.29	22.08
ILMN_1720158	ETS2	v-ets erythroblastosis virus E26 oncogene homolog 2 (avian) (ETS2), mRNA.	NM_005239.4	9.08	10.81	1.73	22.08
ILMN_2399304	NAV2	neuron navigator 2 (NAV2), transcript variant 2, mRNA.	NM_145117.3	6.62	8.8	2.18	21.87
ILMN_1695604	DCBLD1	discoidin, CUB and LCCL domain containing 1 (DCBLD1), mRNA.	NM_173674.1	8.61	11.02	2.41	21.63
ILMN_1812926	ANTXR2	anthrax toxin receptor 2 (ANTXR2), mRNA.	NM_058172.3	7.54	9.82	2.29	21.49
ILMN_1768534	BHLHB2	basic helix-loop-helix domain containing, class B, 2 (BHLHB2), mRNA.	NM_003670.1	9.01	10.97	1.95	21.36
ILMN_2315979	LBH	limb bud and heart development homolog (mouse) (LBH), mRNA.	NM_030915.1	7.36	9.64	2.28	21.32
ILMN_1701424	LAMC2	laminin, gamma 2 (LAMC2), transcript variant 1, mRNA.	NM_005562.1	11.18	12.87	1.69	21.01
ILMN_1723198	CDKN2B	cyclin-dependent kinase inhibitor 2B (p15, inhibits CDK4) (CDKN2B), transcript variant 1, mRNA.	NM_004936.3	8.49	10.73	2.23	20.64
ILMN_1698666	CST6	cystatin E/M (CST6), mRNA.	NM_001323.2	6.35	8.19	1.85	20.59
ILMN_1752810	LARP6	La ribonucleoprotein domain family, member 6 (LARP6), transcript variant 1, mRNA.	NM_18357.2	9.13	10.9	1.76	20.57
ILMN_1746502	LOC399978	PREDICTED: hypothetical LOC399978 (LOC399978), mRNA.	NM_944623.2	6.21	8.98	2.78	20.5
ILMN_1714433	MARCKSL1	MARCKS-like 1 (MARCKSL1), mRNA.	NM_023009.4	8.71	10.1	1.39	20.48
ILMN_2044645	CGB1	chorionic gonadotropin, beta polypeptide 1 (CGB1), mRNA.	NM_033377.1	7.4	9.42	2.01	20.47
ILMN_1812526	TGFb2	transforming growth factor, beta 2 (TGFb2), mRNA.	NM_003238.1	5.83	7.9	2.07	20.42
ILMN_1729161	NOTCH1	Notch homolog 1, translocation-associated (Drosophila) (NOTCH1), mRNA.	NM_017617.3	11.98	10.14	-1.84	20.41
ILMN_2367258	SMOX	spermine oxidase (SMOX), transcript variant 2, mRNA.	NM_175840.1	7.83	9.59	1.76	20.34
ILMN_2400644	SRGAP3	SLIT-ROBO Rho GTPase activating protein 3 (SRGAP3), transcript variant 2, mRNA.	NM_001033117.1	9.21	7.19	-2.02	20.16
ILMN_2163790	CGB5	chorionic gonadotropin, beta polypeptide 5 (CGB5), mRNA.	NM_033043.1	6.62	8.81	2.19	20.16
ILMN_1659610	TJP3	tight junction protein 3 (zona occludens 3) (TJP3), mRNA.	NM_014428.1	9.5	7.44	-2.06	19.93
ILMN_1777233	E2F2	E2F transcription factor 2 (E2F2), mRNA.	NM_004091.2	11.11	9.37	-1.74	19.52
ILMN_1697954	ADRA1B	adrenergic, alpha-1B-, receptor (ADRA1B), mRNA.	NM_000679.3	6.65	8.95	2.3	19.52
ILMN_2405305	ARNTL	aryl hydrocarbon receptor nuclear translocator-like (ARNTL), transcript variant 2, mRNA.	NM_001030272.1	7.55	9.43	1.87	19.52
ILMN_1657823	PMEPA1	prostate transmembrane protein, androgen induced 1 (PMEPA1), transcript variant 1, mRNA.	NM_020182.3	6.21	8.29	2.08	19.38
ILMN_1769615	FLRT2	fibronectin leucine rich transmembrane protein 2 (FLRT2), mRNA.	NM_013231.4	6.22	8.35	2.13	19.02
ILMN_1830462	XYLT1	xylosyltransferase 1 (XYLT1), mRNA.	NM_022166.3	5.89	7.63	1.73	18.87
ILMN_1892643		RST11549 Athersys RAGE Library cDNA, mRNA sequence		7.96	9.84	1.87	18.77
ILMN_1713744	C14orf132	chromosome 14 open reading frame 132 (C14orf132), mRNA.	NM_020215.2	7.75	6.29	-1.46	18.6
ILMN_1806907	PAWR	PRKC, apoptosis, WT1, regulator (PAWR), mRNA.	NM_002588.2	10.68	11.97	1.28	18.6
ILMN_1664861	ID1	inhibitor of DNA binding 1, dominant negative helix-loop-helix protein (ID1), transcript variant 2, mRNA.	NM_181353.1	11.36	9.61	-1.75	18.53
ILMN_1760247	CD70	CD70 molecule (CD70), mRNA.	NM_001252.3	8.45	6.98	-1.47	18.36
ILMN_1691376	JAG1	jagged 1 (Alagille syndrome) (JAG1), mRNA.	NM_000214.1	9.72	11.03	1.31	18.36
ILMN_1810000	RDH16	retinol dehydrogenase 16 (all-trans) (RDH16), mRNA.	NM_003708.3	6.45	8.75	2.31	18.36
ILMN_1704418	FOXO1	forkhead box O1 (FOXO1), mRNA.	NM_004472.2	9.19	10.79	1.6	18.35
ILMN_1672102	PTPBR	protein tyrosine phosphatase, receptor type, B (PTPBR), mRNA.	NM_002837.2	7.38	9.03	1.65	18.35
ILMN_1719695	NFKBIZ	nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, zeta (NFKBIZ), transcript variant 2, mRNA.	NM_001005474.1	10.6	9.06	-1.55	18.28
ILMN_1682775	EDN1	endothelin 1 (EDN1), mRNA.	NM_001955.2	6.94	8.77	1.83	18.27
ILMN_2406035	LAMA3	laminin, alpha 3 (LAMA3), transcript variant 1, mRNA.	NM_198129.1	11.25	12.96	1.72	18.23
ILMN_1720513	SETBP1	SET binding protein 1 (SETBP1), mRNA.	NM_015559.1	8.41	9.8	1.39	18.01
ILMN_1704247	LAMA3	laminin, alpha 3 (LAMA3), transcript variant 2, mRNA.	NM_000227.2	6.99	8.54	1.55	17.74
ILMN_1805665	FLRT3	fibronectin leucine rich transmembrane protein 3 (FLRT3), transcript variant 2, mRNA.	NM_198391.1	9.44	10.89	1.45	17.46
ILMN_2203896	SMAD7	SMAD family member 7 (SMAD7), mRNA.	NM_005904.2	7.17	9.23	2.06	17.46
ILMN_2082585	SNAI2	snail homolog 2 (Drosophila) (SNAI2), mRNA.	NM_003068.3	10.53	12.36	1.83	17.46
ILMN_1781745	C9orf152	chromosome 9 open reading frame 152 (C9orf152), mRNA.	NM_001012993.1	7.69	6.02	-1.66	17.45
ILMN_1706519	LAMC2	laminin, gamma 2 (LAMC2), transcript variant 2, mRNA.	NM_018891.1	7.37	9.71	2.34	17.43
ILMN_1723123	FGFR3	fibroblast growth factor receptor 3 (achondroplasia, thanatophoric dwarfism) (FGFR3), transcript variant 2, mRNA.	NM_022965.1	12.28	10.81	-1.47	17.28
ILMN_1702487	SGK	serum/glucocorticoid regulated kinase (SGK), mRNA.	NM_005627.2	9.48	11.06	1.58	17.15
ILMN_1685339	TPM1	tropomyosin 1 (alpha) (TPM1), transcript variant 6, mRNA.	NM_001018008.1	7.34	9	1.67	16.98
ILMN_2278152	TPM1	tropomyosin 1 (alpha) (TPM1), transcript variant 6, mRNA.	NM_001018008.1	7.33	9.12	1.79	16.98
ILMN_1697733	CST6	PREDICTED: cystatin E/M (CST6), mRNA.	XM_001129442.1	6.19	7.95	1.76	16.91
ILMN_1759232	IRS1	insulin receptor substrate 1 (IRS1), mRNA.	NM_005544.1	7.42	9.02	1.61	16.77
ILMN_1796316	MMP9	matrix metalloproteinase 9 (gelatinase B, 92kDa gelatinase, 92kDa type IV collagenase) (MMP9), mRNA.	NM_004994.2	6.29	8.32	2.04	16.64
ILMN_1669819	LOC402569	PREDICTED: similar to importin alpha 1b (LOC402569), misc RNA.	XR_015714.1	6.01	7.68	1.67	16.58
ILMN_1716608	NGF	nerve growth factor (beta polypeptide) (NGF), mRNA.	NM_002506.2	6.44	7.84	1.39	16.56
ILMN_1730575	GCLC	glutamate-cysteine ligase, catalytic subunit (GCLC), mRNA.	NM_001498.2	10.52	8.9	-1.61	16.41
ILMN_1784287	TGFBR3	transforming growth factor, beta receptor III (TGFBR3), mRNA.	NM_003243.2	8.43	6.78	-1.66	16.21
ILMN_1803593	WNT3	wingless-type MMTV integration site family, member 3 (WNT3), mRNA.	NM_030753.3	8.28	9.99	1.72	16.06
ILMN_1653028	COL4A1	collagen, type IV, alpha 1 (COL4A1), mRNA.	NM_001845.4	9.88	11.2	1.32	16.05
ILMN_1730670	FSTL3	folliculin-like 3 (secreted glycoprotein) (FSTL3), mRNA.	NM_005860.2	8.54	10.08	1.54	15.91
ILMN_1663401	LARP6	La ribonucleoprotein domain family, member 6 (LARP6), transcript variant 2, mRNA.	NM_197958.1	9.91	11.16	1.25	15.9
ILMN_1668411	FHL2	four and a half LIM domains 2 (FHL2), transcript variant 4, mRNA.	NM_201557.2	10.8	11.96	1.16	15.88
ILMN_1718387	LOR	loricrin (LOR), mRNA.	NM_000427.1	5.94	7.53	1.58	15.84
ILMN_1665792	ITGA2	integrin, alpha 2 (CD49B, alpha 2 subunit of VLA-2 receptor) (ITGA2), mRNA.	NM_002203.3	9.56	11.38	1.82	15.77
ILMN_1688892	LAMA3	laminin, alpha 3 (LAMA3), transcript variant 1, mRNA.	NM_198129.1	9.86	11.45	1.59	15.73
ILMN_1713995	SCNN1A	sodium channel, nonvoltage-gated 1 alpha (SCNN1A), mRNA.	NM_001038.4	10.84	9.32	-1.51	15.62
ILMN_2365465	XBP1	X-box binding protein 1 (XBP1), transcript variant 2, mRNA.	NM_001079539.1	11.41	12.48	1.07	15.55
ILMN_1718977	GADD45B	growth arrest and DNA-damage-inducible, beta (GADD45B), mRNA.	NM_015675.2	6.87	8.5	1.62	15.49
ILMN_1701204	VEGFC	vascular endothelial growth factor C (VEGFC), mRNA.	NM_005429.2	7.03	8.48	1.45	15.48
ILMN_1812297	CYP26B1	cytochrome P450, family 26, subfamily B, polypeptide 1 (CYP26B1), mRNA.	NM_019885.2	9.25	10.51	1.26	15.38
ILMN_1692754	TMEM49	transmembrane protein 49 (TMEM49), mRNA.	NM_030938.2	10.86	12.21	1.35	15.32
ILMN_1790577	SLC35F2	solute carrier family 35, member F2 (SLC35F2), mRNA.	NM_017515.3	9.29	10.47	1.18	15.32
ILMN_1733831	PGBD5	piggyBac transposable element derived 5 (PGBD5), mRNA.	NM_024554.2	6.07	7.89	1.82	15.31
ILMN_1676728	DLK2	delta-like 2 homolog (Drosophila) (DLK2), transcript variant 2, mRNA.	NM_206539.1	10.81	9.68	-1.13	15.3
ILMN_1801504	RUNX1	runt-related transcription factor 1 (acute myeloid leukemia 1; aml1 oncogene) (RUNX1), transcript variant 1, mRNA.	NM_001754.3	9.6	10.89	1.29	15.1

**Supplement 2: TGFb Signature** - significantly regulated genes upon 4h TGFb stimulation of HaCaT cells

Illumina Identifier	HGNC gene symbol	Gene Description	Refseq ID	UT 4h	UT+TGFb 4h	LR +/- TGFb 4h	-log10 pVAL LR +/- TGFb 4h
ILMN_1849033		Homo sapiens, clone IMAGE:5403381, mRNA		6.36	7.79	1.43	15.06
ILMN_1663866	TGFB1	transforming growth factor, beta-induced, 68kDa (TGFB1), mRNA.	NM_000358.1	13.93	15.1	1.18	15.03
ILMN_1785404	FGFBP1	fibroblast growth factor binding protein 1 (FGFBP1), mRNA.	NM_005130.3	12.59	11.47	-1.12	15
ILMN_1788131	CYP26A1	cytochrome P450, family 26, subfamily A, polypeptide 1 (CYP26A1), transcript variant 2, mRNA.	NM_057157.1	7.44	6.04	-1.4	14.81
ILMN_1658094	ZNF365	zinc finger protein 365 (ZNF365), transcript variant A, mRNA.	NM_014951.2	9.39	10.8	1.41	14.72
ILMN_1693912	SLC47A2	solute carrier family 47, member 2 (SLC47A2), transcript variant 1, mRNA.	NM_152908.3	10.13	8.49	-1.64	14.7
ILMN_1752932	MPZL2	myelin protein zero-like 2 (MPZL2), transcript variant 1, mRNA.	NM_005797.2	12.72	11.48	-1.24	14.69
ILMN_1689431	APCDD1L	adenomatosis polyposis coli down-regulated 1-like (APCDD1L), mRNA.	NM_153360.1	8.11	9.72	1.61	14.61
ILMN_1804662	NRG4	neuregulin 4 (NRG4), mRNA.	NM_138573.2	9.59	8.32	-1.27	14.58
ILMN_1700042	TLN2	talín 2 (TLN2), mRNA.	NM_015059.1	6.81	8.68	1.87	14.56
ILMN_1816174		cDNA clone IMAGE:5261489		8.99	7.2	-1.79	14.55
ILMN_2198878	INPP4B	inositol polyphosphate-4-phosphatase, type II, 105kDa (INPP4B), mRNA.	NM_003866.1	9.42	10.81	1.39	14.47
ILMN_1676663	TNFRSF11B	tumor necrosis factor receptor superfamily, member 11b (osteoprotegerin) (TNFRSF11B), mRNA.	NM_002546.3	7.26	9.04	1.77	14.47
ILMN_1651826	BASP1	brain abundant, membrane attached signal protein 1 (BASP1), mRNA.	NM_006317.3	7.94	9.58	1.64	14.44
ILMN_1680018	RIPK4	receptor-interacting serine-threonine kinase 4 (RIPK4), mRNA.	NM_020639.2	9.62	8.34	-1.28	14.29
ILMN_1811468	IRX3	iroquois homeobox 3 (IRX3), mRNA.	NM_024336.1	13.15	12.13	-1.02	14.29
ILMN_1874689		primary neuroblastoma cDNA, clone:Nbla10527, full insert sequence		10.24	11.65	1.42	14.29
ILMN_1811470	PLEK2	pleckstrin 2 (PLEK2), mRNA.	NM_016445.1	9.58	11.03	1.45	14.23
ILMN_1706531	ABCC5	ATP-binding cassette, sub-family C (CFTR/MRP), member 5 (ABCC5), transcript variant 1, mRNA.	NM_005688.2	11.44	10.15	-1.29	14.19
ILMN_2357134	SPHK1	sphingosine kinase 1 (SPHK1), transcript variant 1, mRNA.	NM_021972.2	7.02	8.43	1.41	14.15
ILMN_1920308	AGENCOURT	13567612 NIH MGC_184 cDNA clone IMAGE:30326575 5, mRNA sequence		9.8	11.36	1.56	14.13
ILMN_1698856	RALGDS	ral guanine nucleotide dissociation stimulator (RALGDS), transcript variant 1, mRNA.	NM_006266.2	12.46	11.2	-1.26	13.83
ILMN_1790317	RAB26	RAB26, member RAS oncogene family (RAB26), mRNA.	NM_014353.4	9.22	7.7	-1.52	13.8
ILMN_1709750	SUSD1	sushi domain containing 1 (SUSD1), mRNA.	NM_022486.3	8.06	9.15	1.1	13.8
ILMN_1810604	ELMOD1	ELMO/CEP-120 domain containing 1 (ELMOD1), mRNA.	NM_018712.2	6.27	7.52	1.25	13.76
ILMN_1736834	SKIL	SKI-like oncogene (SKIL), mRNA.	NM_005414.2	6.63	8.44	1.81	13.73
ILMN_2328094	DACT1	dapper, antagonist of beta-catenin, homolog 1 (Xenopus laevis) (DACT1), transcript variant 1, mRNA.	NM_016651.5	5.99	7.39	1.4	13.6
ILMN_1696585	FERMT1	fermitin family homolog 1 (Drosophila) (FERMT1), mRNA.	NM_017671.4	10.99	12.35	1.36	13.6
ILMN_1795298	GPET	G protein-coupled estrogen receptor 1 (GPET), transcript variant 3, mRNA.	NM_001039966.1	8.39	6.97	-1.42	13.47
ILMN_1672022	EPHA4	EPH receptor A4 (EPHA4), mRNA.	NM_004438.3	7.42	9	1.58	13.47
ILMN_1786470	C1orf74	chromosome 1 open reading frame 74 (C1orf74), mRNA.	NM_152485.2	8.66	9.71	1.06	13.45
ILMN_1718607	TSPAN4	tetraspanin 4 (TSPAN4), transcript variant 3, mRNA.	NM_001025235.1	8.97	10.35	1.39	13.44
ILMN_1881514		cDNA FLJ36847 fis, clone ASTRO2013671		7.43	8.61	1.17	13.4
ILMN_1724686	CLDN1	claudin 1 (CLDN1), mRNA.	NM_021101.3	13.73	12.18	-1.55	13.39
ILMN_1743619	NEDD9	neural precursor cell expressed, developmentally down-regulated 9 (NEDD9), transcript variant 2, mRNA.	NM_182966.2	6.52	7.8	1.28	13.33
ILMN_2199389	VIPR1	vasoactive intestinal peptide receptor 1 (VIPR1), mRNA.	NM_004624.2	8.24	9.61	1.37	13.29
ILMN_1660794	LBH	PREDICTED: hypothetical protein DKFZp566j091 (LBH), mRNA.	XM_001132517.1	6.14	7.55	1.41	13.28
ILMN_2115005	FGD2	FYVE, RhoGEF and PH domain containing 2 (FGD2), mRNA.	NM_173558.2	6.59	8.12	1.52	13.27
ILMN_1764201	MAP2	microtubule-associated protein 2 (MAP2), transcript variant 2, mRNA.	NM_031845.2	6.8	8.21	1.41	13.27
ILMN_1677636	COMP	cartilage oligomeric matrix protein (COMP), mRNA.	NM_000095.2	5.67	7.11	1.44	13.22
ILMN_1759598	DLX5	distal-less homeobox 5 (DLX5), mRNA.	NM_005221.5	7.66	8.83	1.17	13.21
ILMN_1790338	PRRX2	paired related homeobox 2 (PRRX2), mRNA.	NM_016307.3	5.91	7.39	1.48	13.21
ILMN_1664016	ARHGEF18	rho/rac guanine nucleotide exchange factor (GEF) 18 (ARHGEF18), mRNA.	NM_015318.2	11.76	12.7	0.94	13.21
ILMN_1726893	EPN3	epsin 3 (EPN3), mRNA.	NM_017957.1	8.84	7.22	-1.63	13.08
ILMN_1699695	TNFRSF21	tumor necrosis factor receptor superfamily, member 21 (TNFRSF21), mRNA.	NM_014452.3	11.28	12.71	1.42	13.08
ILMN_1689306	TMC7	transmembrane channel-like 7 (TMC7), mRNA.	NM_024847.2	7.28	8.53	1.26	12.96
ILMN_230787	FRMD6	FERM domain containing 6 (FRMD6), transcript variant 2, mRNA.	NM_152330.3	9.78	10.94	1.17	12.9
ILMN_1713952	C1orf106	chromosome 1 open reading frame 106 (C1orf106), mRNA.	NM_018265.1	11.08	12.23	1.15	12.89
ILMN_1705442	CMTM3	CKLF-like MARVEL transmembrane domain containing 3 (CMTM3), transcript variant 1, mRNA.	NM_144601.2	8.39	9.54	1.15	12.83
ILMN_2414325	TNFAIP8	tumor necrosis factor, alpha-induced protein 8 (TNFAIP8), transcript variant 2, mRNA.	NM_001077654.1	8.63	9.79	1.16	12.77
ILMN_1651365	ZBED2	zinc finger, BED-type containing 2 (ZBED2), mRNA.	NM_024508.3	10.42	11.55	1.12	12.74
ILMN_1676413	VSNL1	visinin-like 1 (VSNL1), mRNA.	NM_003385.4	10.09	8.99	-1.1	12.71
ILMN_1789846	ITGB6	integrin, beta 6 (ITGB6), mRNA.	NM_000888.3	6.03	7.64	1.61	12.68
ILMN_1745623	EFCAB4A	EF-hand calcium binding domain 4A (EFCAB4A), mRNA.	NM_173584.3	8.84	9.87	1.04	12.62
ILMN_1797776	PRSS23	protease, serine, 23 (PRSS23), mRNA.	NM_007173.4	9.51	10.73	1.21	12.57
ILMN_1812073	ATP6V1B1	ATPase, H+ transporting, lysosomal 56/58kDa, V1 subunit B1 (Renal tubular acidosis with deafness) (ATP6V1B1), mRNA.	NM_001692.3	10.85	8.86	-2	12.56
ILMN_1735052	ULK1	unc-51-like kinase 1 (C. elegans) (ULK1), mRNA.	NM_003565.1	11.82	12.84	1.02	12.48
ILMN_1685663	CYP24A1	cytochrome P450, family 24, subfamily A, polypeptide 1 (CYP24A1), nuclear gene encoding mitochondrial protein, mRNA.	NM_000782.3	5.6	6.63	1.03	12.38
ILMN_1677432	SRGAP1	SLIT-ROBO Rho GTPase activating protein 1 (SRGAP1), mRNA.	NM_020762.1	8.55	9.78	1.22	12.38
ILMN_1801216	S100P	S100 calcium binding protein P (S100P), mRNA.	NM_005980.2	8.27	9.71	1.44	12.36
ILMN_1706505	COL5A1	collagen, type V, alpha 1 (COL5A1), mRNA.	NM_000093.3	6.73	8.1	1.37	12.32
ILMN_2388397	LYPD1	LY6/PLAUR domain containing 1 (LYPD1), transcript variant 2, mRNA.	NM_001077427.2	7.54	8.67	1.13	12.22
ILMN_1663092	CITED2	Cbp/p300-interacting transactivator, with Glu/Asp-rich carboxy-terminal domain, 2 (CITED2), mRNA.	NM_006079.3	9.12	7.87	-1.25	12.21
ILMN_1684554	COL16A1	collagen, type XVI, alpha 1 (COL16A1), mRNA.	NM_001856.3	8.49	9.54	1.05	12.14
ILMN_1799848	ANKRD22	ankyrin repeat domain 22 (ANKRD22), mRNA.	NM_144590.2	8.33	6.72	-1.61	12.13
ILMN_2205963	C10orf54	chromosome 10 open reading frame 54 (C10orf54), mRNA.	NM_022153.1	10	8.99	-1.01	12.13
ILMN_2355831	FHL2	four and a half LIM domains 2 (FHL2), transcript variant 2, mRNA.	NM_201555.1	11.88	12.88	1.01	12.02
ILMN_2362902	RASSF5	Ras association (RalGDS/AF-6) domain family member 5 (RASSF5), transcript variant 2, mRNA.	NM_182664.2	9.34	8.05	-1.28	12
ILMN_1796925	CXADR	coxsaackie virus and adenovirus receptor (CXADR), mRNA.	NM_001338.3	10.46	9.22	-1.23	11.88
ILMN_1795285	PHF15	PHD finger protein 15 (PHF15), mRNA.	NM_015288.4	8.93	7.71	-1.22	11.88
ILMN_2132599	ANKRD22	ankyrin repeat domain 22 (ANKRD22), mRNA.	NM_144590.1	8.8	7.19	-1.61	11.86
ILMN_1746085	IGFBP3	insulin-like growth factor binding protein 3 (IGFBP3), transcript variant 2, mRNA.	NM_000598.4	10.44	9.52	-0.92	11.85
ILMN_1719543	MAF	v-maf musculoaponeurotic fibrosarcoma oncogene homolog (avian) (MAF), transcript variant 1, mRNA.	NM_005360.3	7.91	9.09	1.18	11.84
ILMN_1686116	THBS1	thrombospondin 1 (THBS1), mRNA.	NM_003246.2	11.1	12.8	1.7	11.8
ILMN_1653836	C11orf41	chromosome 11 open reading frame 41 (C11orf41), mRNA.	NM_012194.1	6.41	7.47	1.06	11.76
ILMN_1700024	UST	uronylyl-2-sulfotransferase (UST), mRNA.	NM_005715.1	7.96	6.78	-1.18	11.72
ILMN_1753439	RPTN	PREDICTED: repetin (RPTN), mRNA.	XM_937200.2	6.73	8.04	1.31	11.72
ILMN_2384056	GPET	G protein-coupled estrogen receptor 1 (GPET), transcript variant 3, mRNA.	NM_001039966.1	8.35	6.94	-1.41	11.67
ILMN_1711894	MYB	v-myb myeloblastosis viral oncogene homolog (avian) (MYB), mRNA.	NM_005375.2	7.42	6.24	-1.18	11.67
ILMN_1664912	IL11RA	interleukin 11 receptor, alpha (IL11RA), transcript variant 1, mRNA.	NM_004512.3	9.69	8.58	-1.12	11.52
ILMN_1668863	LYPD1	LY6/PLAUR domain containing 1 (LYPD1), transcript variant 1, mRNA.	NM_144586.5	8.15	9.58	1.44	11.52
ILMN_2327860	MAL	mal, T-cell differentiation protein (MAL), transcript variant d, mRNA.	NM_022440.1	10.46	8.59	-1.88	11.51
ILMN_1705144	ULK1	unc-51-like kinase 1 (C. elegans) (ULK1), mRNA.	NM_003565.1	11.79	12.83	1.04	11.51
ILMN_2091347	IDH1	isocitrate dehydrogenase 1 (NADP+), soluble (IDH1), mRNA.	NM_005896.2	11.53	10.57	-0.97	11.38
ILMN_1784300	TUBA4A	tubulin, alpha 4a (TUBA4A), mRNA.	NM_006000.1	11.34	12.34	1	11.35
ILMN_1699631	GATS	opposite strand transcription unit to STAG3 (GATS), mRNA.	NM_178831.4	9.01	7.79	-1.22	11.34
ILMN_1759676	HOXC13	homeobox C13 (HOXC13), mRNA.	NM_017410.2	10.74	9.61	-1.13	11.34
ILMN_1688480	CCND1	cyclin D1 (CCND1), mRNA.	NM_003506.2	13.05	13.98	0.93	11.34
ILMN_1808220	LCE3E	late cornified envelope 3E (LCE3E), mRNA.	NM_178435.2	5.71	6.92	1.21	11.32
ILMN_1743130	PTGFRN	prostaglandin F2 receptor negative regulator (PTGFRN), mRNA.	NM_020440.2	9.8	10.86	1.06	11.32
ILMN_2405254	GRB7	growth factor receptor-bound protein 7 (GRB7), transcript variant 2, mRNA.	NM_001030002.1	9.18	8.08	-1.1	11.25
ILMN_2142353	GRTF1	growth hormone regulated TBC protein 1 (GRTF1), mRNA.	NM_024719.2	9.18	8.01	-1.17	11.25
ILMN_2082209	C20orf100	chromosome 20 open reading frame 100 (C20orf100), mRNA.	NM_032883.1	9.88	10.76	0.88	11.24
ILMN_1722089	RNF217	ring finger protein 217 (RNF217), mRNA.	NM_152553.2	7.87	9.22	1.35	11.22
ILMN_1736760	KRT16	keratin 16 (focal non-epidermolytic palmoplantar keratoderma) (KRT16), mRNA.	NM_005557.2	8.44	9.73	1.29	11.21
ILMN_1707695	IFIT1	interferon-induced protein with tetratricopeptide repeats 1 (IFIT1), transcript variant 2, mRNA.	NM_001548.3	9.15	7.67	-1.48	11.19
ILMN_1838691		BX116929 Soares_multiple_sclerosis_2NbHMSF cDNA clone IMAGp998E17622, mRNA sequence		7.75	9.04	1.29	11.1
ILMN_1737314	BCL6	B-cell CLL/lymphoma 6 (zinc finger protein 51) (BCL6), transcript variant 1, mRNA.	NM_001706.2	10.05	9.01	-1.04	11.07
ILMN_2153332	ATXN1	ataxin 1 (ATXN1), mRNA.	NM_000332.2	8.31	9.75	1.44	11.05
ILMN_1791328	STK39	serine threonine kinase 39 (STE20/SPS1 homolog, yeast) (STK39), mRNA.	NM_013233.2	10.67	9.79	-0.88	10.95
ILMN_1671365	PRODH	proline dehydrogenase (oxidase) 1 (PRODH), nuclear gene encoding mitochondrial protein, mRNA.	NM_016335.2	8.39	7.08	-1.31	10.93
ILMN_1703593	BAIAP2L1	BAI1-associated protein 2-like 1 (BAIAP2L1), mRNA.	NM_018842.3	10.4	11.3	0.89	10.92
ILMN_1712431	FAM113B	family with sequence similarity 113, member B (FAM113B), mRNA.	NM_138371.1	9.2	10.19	0.99	10.85

**Supplement 2: TGFb Signature - significantly regulated genes upon 4h TGFb stimulation of HaCaT cells**

Illumina Identifier	HGNC gene symbol	Gene Description	Refseq ID	UT 4h	UT+TGFb 4h	LR +/- TGFb 4h	-log10 pVAL LR +/- TGFb 4h
ILMN_1769282	FRMD6	FERM domain containing 6 (FRMD6), mRNA.	NM_152330.2	11.3	12.41	1.11	10.81
ILMN_1748970	ATAD4	ATPase family, AAA domain containing 4 (ATAD4), mRNA.	NM_024320.2	9.08	7.77	-1.3	10.78
ILMN_1807767	KIAA0182	KIAA0182 (KIAA0182), mRNA.	NM_014615.1	9.92	9.07	-0.86	10.76
ILMN_1796335	LPCAT2	lysophosphatidylcholine acyltransferase 2 (LPCAT2), mRNA.	NM_017839.3	9.06	10.19	1.12	10.69
ILMN_1742461	UAP1	UDP-N-acetylglucosamine pyrophosphorylase 1 (UAP1), mRNA.	NM_003115.3	8.12	9.34	1.23	10.64
ILMN_2352090	GPCR5C	G protein-coupled receptor, family C, group 5, member C (GPCR5C), transcript variant 2, mRNA.	NM_018653.3	10.55	9.62	-0.93	10.62
ILMN_2261076	NEDD9	neural precursor cell expressed, developmentally down-regulated 9 (NEDD9), transcript variant 1, mRNA.	NM_006403.2	7.9	9.19	1.29	10.57
ILMN_2308849	MYADM	myeloid-associated differentiation marker (MYADM), transcript variant 4, mRNA.	NM_001020820.1	10.58	11.71	1.13	10.53
ILMN_1682139	RAI14	retinoic acid induced 14 (RAI14), mRNA.	NM_015577.1	8.31	9.28	0.98	10.5
ILMN_1674135	RALGPS1	Ral GEF with PH domain and SH3 binding motif 1 (RALGPS1), mRNA.	NM_014636.1	10.21	9.04	-1.18	10.49
ILMN_1746243	TES	testis derived transcript (3 LIM domains) (TES), transcript variant 1, mRNA.	NM_015641.2	8.56	9.8	1.25	10.48
ILMN_2146761	FABP5	fatty acid binding protein 5 (psoriasis-associated) (FABP5), mRNA.	NM_001444.1	8.55	9.78	1.22	10.44
ILMN_1784608	CLEC2B	C-type lectin domain family 2, member B (CLEC2B), mRNA.	NM_005127.2	7.74	6.51	-1.23	10.33
ILMN_1715684	LAMB3	laminin, beta 3 (LAMB3), transcript variant 1, mRNA.	NM_000228.2	12.51	13.39	0.88	10.31
ILMN_2222880	SLC25A42	solute carrier family 25, member 42 (SLC25A42), mRNA.	NM_178526.1	9.07	8.26	-0.81	10.3
ILMN_1751464	TNFSF9	tumor necrosis factor (ligand) superfamily, member 9 (TNFSF9), mRNA.	NM_003811.2	8.11	6.92	-1.19	10.28
ILMN_2399919	MLXIPL	MLX interacting protein-like (MLXIPL), transcript variant 3, mRNA.	NM_032953.2	7.22	6.17	-1.05	10.23
ILMN_1679051	PTPRR	protein tyrosine phosphatase, receptor type, R (PTPRR), transcript variant 1, mRNA.	NM_002849.2	6.81	8.43	1.62	10.22
ILMN_1652762	HIC2	hypermethylated in cancer 2 (HIC2), mRNA.	NM_015094.2	9.74	8.78	-0.96	10.14
ILMN_1717326	SLC29A3	solute carrier family 29 (nucleoside transporters), member 3 (SLC29A3), mRNA.	NM_018344.3	8.62	7.59	-1.04	10.1
ILMN_1725946	IRF6	interferon regulatory factor 6 (IRF6), mRNA.	NM_006147.2	10.87	11.7	0.83	10.1
ILMN_1748685	TRIM31	tripartite motif-containing 31 (TRIM31), mRNA.	NM_007028.3	7.46	6.39	-1.06	10.02
ILMN_2169261	TNNI2	tropomyosin I type 2 (skeletal, fast) (TNNI2), mRNA.	NM_003282.2	8.25	7.16	-1.09	10
ILMN_1676192	SLC13A5	solute carrier family 13 (sodium-dependent citrate transporter), member 5 (SLC13A5), mRNA.	NM_177550.2	5.85	7.07	1.22	9.98
ILMN_1872032		AGENCOURT_10400346 NIH_MGC_82 cDNA clone IMAGE:6616124 5, mRNA sequence		7.33	8.19	0.86	9.91
ILMN_1863962		BX116033 NCI CGAP Lu24 cDNA clone IMAGE:998A155622, mRNA sequence		7.93	6.84	-1.09	9.88
ILMN_2094396	LRR8C8	leucine rich repeat containing 8 family, member C (LRR8C8), mRNA.	NM_032270.2	7.54	9.07	1.53	9.84
ILMN_1679782	BLOC1S2	biogenesis of lysosome-related organelles complex-1, subunit 2 (BLOC1S2), transcript variant 2, mRNA.	NM_001001342.1	7.03	8.09	1.07	9.78
ILMN_2397028	SERPINB8	serpin peptidase inhibitor, clade B (ovalbumin), member 8 (SERPINB8), transcript variant 1, mRNA.	NM_002640.3	8.89	9.91	1.02	9.76
ILMN_1691410	BAMBI	BMP and activin membrane-bound inhibitor homolog (Xenopus laevis) (BAMBI), mRNA.	NM_012342.2	7.58	9.26	1.68	9.74
ILMN_1690064	RUNDC2C	RUN domain containing 2C (RUNDC2C) on chromosome 16.	NR_002939.2	7.54	8.67	1.13	9.74
ILMN_1673548	HSPC159	galectin-related protein (HSPC159), mRNA.	NM_014181.1	8.14	9.1	0.97	9.7
ILMN_1772686	FGD3	FYVE, RhoGEF and PH domain containing 3 (FGD3), transcript variant 2, mRNA.	NM_033086.2	8.03	6.94	-1.09	9.68
ILMN_1810942	CYP3A5	cytochrome P450, family 3, subfamily A, polypeptide 5 (CYP3A5), mRNA.	NM_000777.2	7.14	5.85	-1.29	9.68
ILMN_1693004	C20orf117	chromosome 20 open reading frame 117 (C20orf117), transcript variant 2, mRNA.	NM_199181.2	9.17	8.2	-0.97	9.67
ILMN_1690170	CRABP2	cellular retinoic acid binding protein 2 (CRABP2), mRNA.	NM_001878.2	9.84	8.83	-1.01	9.67
ILMN_1910908		RST24587 Athersys RAGE Library cDNA, mRNA sequence		6.09	7.11	1.03	9.66
ILMN_1815032	SOX7	SRY (sex determining region Y)-box 7 (SOX7), mRNA.	NM_031439.2	9.11	7.91	-1.2	9.63
ILMN_1738578	FILIP1L	filamin A interacting protein 1-like (FILIP1L), transcript variant 2, mRNA.	NM_014890.2	8.1	9.32	1.22	9.63
ILMN_1813704	KIAA1199	KIAA1199 (KIAA1199), mRNA.	NM_018689.1	7.48	8.68	1.19	9.63
ILMN_1788931	DOCK8	dedicator of cytokinesis 8 (DOCK8), mRNA.	NM_203447.1	7.04	5.92	-1.12	9.6
ILMN_1694106	GPD1L	glycerol-3-phosphate dehydrogenase 1-like (GPD1L), mRNA.	NM_015141.2	10.12	9.17	-0.95	9.56
ILMN_1754114	FLJ20021	PREDICTED: hypothetical LOC90024 (FLJ20021), mRNA.	XM_028217.4	8.24	9.12	0.88	9.56
ILMN_2364131	C20orf121	chromosome 20 open reading frame 121 (C20orf121), transcript variant 1, mRNA.	NM_024331.3	10.15	11.1	0.95	9.5
ILMN_1714600	NAV3	neuron navigator 3 (NAV3), mRNA.	NM_014903.4	6.39	7.74	1.35	9.49
ILMN_1732296	ID3	inhibitor of DNA binding 3, dominant negative helix-loop-helix protein (ID3), mRNA.	NM_002167.2	11.63	10.65	-0.98	9.47
ILMN_1658847	MGC61598	PREDICTED: similar to ankyrin-repeat protein Nrarp (MGC61598), mRNA.	XM_939432.1	10.58	9.52	-1.06	9.46
ILMN_1666222	PHACTR3	phosphatase and actin regulator 3 (PHACTR3), transcript variant 3, mRNA.	NM_183246.1	5.87	6.95	1.07	9.44
ILMN_2387952	FAM134B	family with sequence similarity 134, member B (FAM134B), transcript variant 1, mRNA.	NM_001034850.1	9.21	8.25	-0.97	9.36
ILMN_1806023	JUN	jun oncogene (JUN), mRNA.	NM_002228.3	9.03	10.29	1.26	9.36
ILMN_1736568	RTTN	rotatin (RTTN), mRNA.	NM_173630.2	9.75	10.65	0.91	9.33
ILMN_2358540	RBMS1	RNA binding motif, single stranded interacting protein 1 (RBMS1), transcript variant 3, mRNA.	NM_002897.3	10.19	11.07	0.88	9.28
ILMN_2157075	LRCH4	leucine-rich repeats and calponin homology (CH) domain containing 4 (LRCH4), mRNA.	NM_002319.3	8.25	7.33	-0.92	9.19
ILMN_1809433	XBP1	X-box binding protein 1 (XBP1), transcript variant 1, mRNA.	NM_005080.2	11.88	12.89	1.01	9.17
ILMN_1663787	KLK3	kalikrein-related peptidase 3 (KLK3), transcript variant 6, mRNA.	NM_001030050.1	6.36	7.68	1.32	9.13
ILMN_1701308	COL1A1	collagen, type I, alpha 1 (COL1A1), mRNA.	NM_000088.3	6.42	7.49	1.07	9.1
ILMN_1796737	APM-1	PREDICTED: BTB/POZ-zinc finger protein-like (APM-1), mRNA.	XM_113971.4	7.31	6.1	-1.21	9.07
ILMN_1798256	UPP1	uridine phosphorylase 1 (UPP1), transcript variant 1, mRNA.	NM_003364.2	11.69	12.52	0.83	9.05
ILMN_1693338	CYP1B1	cytochrome P450, family 1, subfamily B, polypeptide 1 (CYP1B1), mRNA.	NM_000104.2	10.85	9.25	-1.6	9.04
ILMN_1653856	STS-1	Cbl-interacting protein Sts-1 (STS-1), mRNA.	NM_032873.3	9.23	10.48	1.25	9.04
ILMN_2320330	MAL	mal, T-cell differentiation protein (MAL), transcript variant a, mRNA.	NM_002371.2	8.48	7.08	-1.4	9.01
ILMN_1689378	CCR4L	CCR4 carbon catabolite repression 4-like (S. cerevisiae) (CCR4L), mRNA.	NM_012118.2	6.76	8.08	1.32	8.98
ILMN_1653824	LAMC2	laminin, gamma 2 (LAMC2), transcript variant 1, mRNA.	NM_005562.1	9.23	10.73	1.49	8.94
ILMN_1772876	ZNF395	zinc finger protein 395 (ZNF395), mRNA.	NM_018660.2	10.14	9.16	-0.98	8.93
ILMN_1656910	TRIM6	tripartite motif-containing 6 (TRIM6), transcript variant 2, mRNA.	NM_058166.3	8.58	7.53	-1.06	8.93
ILMN_1744442	C20orf121	chromosome 20 open reading frame 121 (C20orf121), transcript variant 2, mRNA.	NM_001039199.1	9.07	10.05	0.98	8.93
ILMN_2148193	MPPED2	metallophosphoesterase domain containing 2 (MPPED2), mRNA.	NM_001584.1	8.24	6.68	-1.56	8.92
ILMN_1715133	IVN51ABP	influenza virus NS1A binding protein (IVN51ABP), transcript variant 2, mRNA.	NM_016389.2	6.57	7.75	1.18	8.9
ILMN_1718960	SERPINB8	serpin peptidase inhibitor, clade B (ovalbumin), member 8 (SERPINB8), transcript variant 2, mRNA.	NM_198833.1	8.74	9.78	1.04	8.85
ILMN_1655930	ELL2	elongation factor, RNA polymerase II, 2 (ELL2), mRNA.	NM_012081.4	9.22	10.2	0.98	8.82
ILMN_1655126	PI4KAP2	phosphatidylinositol 4-kinase, catalytic, alpha polypeptide pseudogene 2 (PI4KAP2), mRNA.	NM_199345.3	10.03	9.2	-0.83	8.81
ILMN_1730794	SERTAD4	SERTA domain containing 4 (SERTAD4), mRNA.	NM_019605.2	8.21	9.32	1.11	8.79
ILMN_1666392	WNT4	wingless-type MMTV integration site family, member 4 (WNT4), mRNA.	NM_030761.3	6.68	7.8	1.13	8.78
ILMN_1856480		cDNA clone IMAGE:5263177		9.52	8.53	-0.98	8.72
ILMN_1678087	MAP3K4	mitogen-activated protein kinase kinase kinase 4 (MAP3K4), transcript variant 1, mRNA.	NM_005922.2	10.37	11.21	0.84	8.72
ILMN_1785900	LOC653108	PREDICTED: similar to coxsackie virus and adenovirus receptor precursor (LOC653108), mRNA.	XR_016129.1	8.39	7.5	-0.89	8.68
ILMN_1809364	NTF3	neurotrophin 3 (NTF3), mRNA.	NM_002527.3	7.29	6.21	-1.08	8.66
ILMN_1709067	SAMD11	sterile alpha motif domain containing 11 (SAMD11), mRNA.	NM_152486.2	6.25	7.33	1.09	8.66
ILMN_2197365	RG52	regulator of G-protein signalling 2, 24kDa (RG52), mRNA.	NM_002923.1	10.08	8.97	-1.11	8.62
ILMN_1713813	LOC400578	PREDICTED: similar to Keratin, type I cytoskeletal 14 (CytoKeratin-14) (CK-14) (Keratin-14) (K14) (LOC400578), mRNA.	XR_017543.1	8.89	10.02	1.14	8.62
ILMN_1809522	BTBD14A	BTB (POZ) domain containing 14A (BTBD14A), mRNA.	NM_144653.3	9.38	10.2	0.82	8.61
ILMN_1769694	ACCN2	amiloride-sensitive cation channel 2, neuronal (ACCN2), transcript variant 2, mRNA.	NM_001095.2	8.07	7.02	-1.05	8.6
ILMN_2195703	PPARGC1B	peroxisome proliferator-activated receptor gamma, coactivator 1 beta (PPARGC1B), mRNA.	NM_133263.2	7.18	6.2	-0.98	8.59
ILMN_2041190	F2RL1	coagulation factor II (thrombin) receptor-like 1 (F2RL1), mRNA.	NM_005242.3	10.22	11.02	0.8	8.59
ILMN_1735788	TRIOBP	TRIO and F-actin binding protein (TRIOBP), transcript variant 6, mRNA.	NM_001039141.1	10.02	10.8	0.78	8.56
ILMN_1777513	KCTD11	potassium channel tetramerisation domain containing 11 (KCTD11), mRNA.	NM_001002914.2	7.91	8.91	1	8.55
ILMN_1736441	PDXP	pyridoxal (pyridoxine, vitamin B6) phosphatase (PDXP), mRNA.	NM_020315.4	9.8	8.96	-0.84	8.54
ILMN_1788107	IL11	interleukin 11 (IL11), mRNA.	NM_000641.2	6.78	7.84	1.06	8.54
ILMN_1726245	TGFB2	transforming growth factor, beta receptor II (70/80kDa) (TGFB2), transcript variant 1, mRNA.	NM_001024847.2	9.01	9.92	0.91	8.54
ILMN_1821176		601441142F1 NIH_MGC_72 cDNA clone IMAGE:3915971 5, mRNA sequence		7.59	6.67	-0.92	8.51
ILMN_1673566	ADAMTS1	ADAM metalloproteinase with thrombospondin type 1 motif, 1 (ADAMTS1), mRNA.	NM_006988.3	7.72	8.83	1.11	8.48
ILMN_1739428	IFIT2	interferon-induced protein with tetratricopeptide repeats 2 (IFIT2), mRNA.	NM_001547.4	9.96	8.78	-1.18	8.44
ILMN_1720710	HSPB3	heat shock 70kDa protein 3 (HSPB3), mRNA.	NM_006308.1	7.42	8.36	0.94	8.44
ILMN_1695475	SEMA3C	sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3C (SEMA3C), mRNA.	NM_006379.2	7.79	9.1	1.3	8.39
ILMN_1708341	PDZK1	PDZ domain containing 1 (PDZK1), mRNA.	NM_002614.3	6.52	7.49	0.97	8.33
ILMN_2052208	GADD45A	growth arrest and DNA-damage-inducible, alpha (GADD45A), mRNA.	NM_001924.2	10.16	10.93	0.76	8.3
ILMN_1715647	VANGL2	vang-like 2 (van gogh, Drosophila) (VANGL2), mRNA.	NM_020335.1	8.79	7.92	-0.86	8.25
ILMN_1708223	PAK6	p21(CDKN1A)-activated kinase 6 (PAK6), mRNA.	NM_020168.3	9.42	8.33	-1.1	8.18
ILMN_2360202	PPP2R2B	protein phosphatase 2 (formerly 2A), regulatory subunit B, beta isoform (PPP2R2B), transcript variant 4, mRNA.	NM_181676.1	8.69	7.68	-1.01	8.16
ILMN_1800540	CD55	CD55 molecule, decay accelerating factor for complement (Cromer blood group) (CD55), mRNA.	NM_000574.2	8.22	9.25	1.04	8.16
ILMN_2384241	TGFB2	transforming growth factor, beta receptor II (70/80kDa) (TGFB2), transcript variant 1, mRNA.	NM_001024847.1	9.83	10.75	0.92	8.16
ILMN_1770338	TM4SF1	transmembrane 4 L six family member 1 (TM4SF1), mRNA.	NM_014220.2	13.62	12.89	-0.73	8.14
ILMN_1808999	ARHGEF19	Rho guanine nucleotide exchange factor (GEF) 19 (ARHGEF19), mRNA.	NM_153213.3	9.81	8.89	-0.92	8.13

**Supplement 2: TGFb Signature** - significantly regulated genes upon 4h TGFb stimulation of HaCaT cells

Illumina Identifier	HGNC gene symbol	Gene Description	Refseq ID	UT 4h	UT+TGFb 4h	LR +/- TGFb 4h	-log10 pVAL LR +/- TGFb 4h
ILMN_2134056	SOX7	SRY (sex determining region Y)-box 7 (SOX7), mRNA.	NM_031439.2	8.63	7.56	-1.07	8.1
ILMN_1742151	NRG2	neuregulin 2 (NRG2), transcript variant 6, mRNA.	NM_013985.1	6.62	5.76	-0.85	8.07
ILMN_2184612	C3orf52	chromosome 3 open reading frame 52 (C3orf52), mRNA.	NM_024616.1	8.13	9.09	0.97	8.07
ILMN_1810962	PTPRK	protein tyrosine phosphatase, receptor type, K (PTPRK), mRNA.	NM_002844.2	10.37	11.44	1.07	8.05
ILMN_1662188	WNT11	wingless-type MMTV integration site family, member 11 (WNT11), mRNA.	NM_004626.2	5.95	6.94	0.98	8.04
ILMN_1653934	LOC650517	PREDICTED: hypothetical LOC650517 (LOC650517), mRNA.	XR_019109.1	9.66	10.76	1.1	8.04
ILMN_1730351	FLJ35767	FLJ35767 protein (FLJ35767), mRNA.	NM_207459.1	7.98	6.89	-1.08	8.02
ILMN_1739222	ETV5	ets variant gene 5 (ets-related molecule) (ETV5), mRNA.	NM_004454.1	7.97	8.99	1.03	8.02
ILMN_1752520	SLFN11	schlafen family member 11 (SLFN11), mRNA.	NM_152270.2	9.01	8.13	-0.88	7.87
ILMN_2086077	JUNB	jun B proto-oncogene (JUNB), mRNA.	NM_002229.2	7.9	8.73	0.83	7.86
ILMN_2374865	ATF3	activating transcription factor 3 (ATF3), transcript variant 4, mRNA.	NM_001040619.1	7.23	8.56	1.34	7.85
ILMN_1730906	FILIP1L	filamin A interacting protein 1-like (FILIP1L), transcript variant 1, mRNA.	NM_182909.2	8.01	9	0.99	7.85
ILMN_1669605	LOC646609	PREDICTED: similar to Chloride intracellular channel protein 4 (Intracellular chloride ion channel protein p64H1) (LOC646609),	XM_929546.1	6.05	7.05	1	7.84
ILMN_2359345	NET1	neuroepithelial cell transforming gene 1 (NET1), transcript variant 2, mRNA.	NM_005863.3	9.61	10.48	0.87	7.84
ILMN_1670158	FAM83A	family with sequence similarity 83, member A (FAM83A), transcript variant 2, mRNA.	NM_207006.1	8.19	9.15	0.95	7.83
ILMN_1748206	C20orf160	chromosome 20 open reading frame 160 (C20orf160), mRNA.	NM_080625.2	5.75	6.45	0.7	7.81
ILMN_1682717	IER3	immediate early response 3 (IER3), mRNA.	NM_003897.3	10.2	11.24	1.04	7.81
ILMN_1722834	RGS12	regulator of G-protein signaling 12 (RGS12), transcript variant 2, mRNA.	NM_002926.3	9.85	10.62	0.77	7.8
ILMN_1770850	PNMA1	paraneoplastic antigen MA1 (PNMA1), mRNA.	NM_006029.4	8.2	9.25	1.05	7.78
ILMN_1822484		603038678F1 NIH_MGC_115 cDNA clone IMAGE:5179554 5, mRNA sequence		5.87	6.77	0.9	7.78
ILMN_1673491	LRAT	lecithin retinol acyltransferase (phosphatidylcholine-retinol O-acyltransferase) (LRAT), mRNA.	NM_004744.3	6.53	7.46	0.93	7.75
ILMN_1778575	WNT7A	wingless-type MMTV integration site family, member 7A (WNT7A), mRNA.	NM_004625.3	8.09	8.99	0.89	7.73
ILMN_1798360	CXCR7	chemokine (C-X-C motif) receptor 7 (CXCR7), mRNA.	NM_020311.2	11.73	12.61	0.87	7.71
ILMN_1801068	DACT1	dapper, antagonist of beta-catenin, homolog 1 (Xenopus laevis) (DACT1), mRNA.	NM_016651.4	6.01	7.05	1.05	7.63
ILMN_1712896	FST	folistatin (FST), transcript variant FST317, mRNA.	NM_006350.2	8.79	9.86	1.07	7.63
ILMN_2088124	TMEM154	transmembrane protein 154 (TMEM154), mRNA.	NM_152680.1	9.95	10.77	0.82	7.63
ILMN_2388484	MAP2	microtubule-associated protein 2 (MAP2), transcript variant 1, mRNA.	NM_002374.3	6.95	8.01	1.07	7.61
ILMN_2179778	PHLDB2	pleckstrin homology-like domain, family B, member 2 (PHLDB2), mRNA.	NM_145753.1	8.79	9.98	1.18	7.59
ILMN_1695590	ADRB2	adrenergic, beta-2-, receptor, surface (ADRB2), mRNA.	NM_000024.4	9.13	8.21	-0.92	7.55
ILMN_2325347	B3GALT1	beta-1,3-N-acetylgalactosaminyltransferase 1 (globoside blood group) (B3GALT1), transcript variant 3, mRNA.	NM_033168.2	7.51	6.71	-0.79	7.54
ILMN_1728298	SBK1	SH3-binding domain kinase 1 (SBK1), mRNA.	NM_001024401.2	7.92	7.19	-0.72	7.52
ILMN_1750748	MGC102966	PREDICTED: similar to Keratin, type I cytoskeletal 16 (CytoKeratin-16) (CK-16) (Keratin-16) (K16) (MGC102966), misc RNA.	XR_015970.1	9.36	10.43	1.07	7.52
ILMN_1673752	C1orf91	chromosome 1 open reading frame 91 (C1orf91), mRNA.	NM_019118.2	7.15	8.03	0.88	7.48
ILMN_1698020	DLC1	deleted in liver cancer 1 (DLC1), transcript variant 3, mRNA.	NM_024767.2	7.43	8.5	1.07	7.47
ILMN_1662795	CA2	carbonic anhydrase II (CA2), mRNA.	NM_000067.1	14.23	13.56	-0.68	7.45
ILMN_1717877	IVNS1ABP	influenza virus NS1A binding protein (IVNS1ABP), mRNA.	NM_006469.4	9.17	10.48	1.31	7.41
ILMN_2111237	MN1	meningioma (disrupted in balanced translocation) 1 (MN1), mRNA.	NM_002430.2	8.75	9.52	0.77	7.4
ILMN_1806651	PARP8	poly (ADP-ribose) polymerase family, member 8 (PARP8), mRNA.	NM_024615.2	8.34	9.47	1.13	7.38
ILMN_1854349		cDNA FLJ13522 fis, clone PLACE1005884		7.47	8.33	0.86	7.37
ILMN_1701881	ZNF365	zinc finger protein 365 (ZNF365), transcript variant B, mRNA.	NM_199450.2	6.42	7.36	0.94	7.37
ILMN_1729417	GNE	glucosamine (UDP-N-acetyl)-2-epimerase/N-acetylmannosamine kinase (GNE), mRNA.	NM_005476.3	8.89	7.84	-1.05	7.31
ILMN_2161577	CXCL6	chemokine (C-X-C motif) ligand 6 (granulocyte chemotactic protein 2) (CXCL6), mRNA.	NM_002993.2	7.56	8.46	0.9	7.31
ILMN_1660204	IGSF9B	immunoglobulin superfamily, member 9B (IGSF9B), mRNA.	NM_014987.1	7.16	8.15	0.99	7.3
ILMN_1652237	CBR3	carbonyl reductase 3 (CBR3), mRNA.	NM_001236.3	10.1	8.85	-1.26	7.29
ILMN_1703123	AXUD1	AXIN1 up-regulated 1 (AXUD1), mRNA.	NM_033027.2	8.77	9.47	0.71	7.29
ILMN_1712673	SASH1	SAM and SH3 domain containing 1 (SASH1), mRNA.	NM_015278.3	8.7	7.85	-0.85	7.28
ILMN_1840316		cDNA clone IMAGE:6186815, partial cds		8.83	8.1	-0.72	7.27
ILMN_1685709	TMEM125	transmembrane protein 125 (TMEM125), mRNA.	NM_144626.1	8.84	7.96	-0.88	7.26
ILMN_1725852	S100A2	S100 calcium binding protein A2 (S100A2), mRNA.	NM_005978.3	10.89	11.81	0.92	7.26
ILMN_1692056	HS3ST3A1	heparan sulfate (glucosamine) 3-O-sulfotransferase 3A1 (HS3ST3A1), mRNA.	NM_006042.1	5.86	6.88	1.02	7.26
ILMN_1771800	PRKCA	protein kinase C, alpha (PRKCA), mRNA.	NM_002737.2	6.84	7.66	0.82	7.24
ILMN_1788547	GCLM	glutamate-cysteine ligase, modifier subunit (GCLM), mRNA.	NM_002061.2	11.19	11.99	0.8	7.2
ILMN_2388800	PPAP2B	phosphatidic acid phosphatase type 2B (PPAP2B), transcript variant 1, mRNA.	NM_003713.3	8.18	8.91	0.73	7.19
ILMN_2396875	IGFBP3	insulin-like growth factor binding protein 3 (IGFBP3), transcript variant 1, mRNA.	NM_001013398.1	9.36	8.48	-0.89	7.17
ILMN_1797704	LOC729252	PREDICTED: similar to Keratin, type I cytoskeletal 14 (CytoKeratin-14) (CK-14) (Keratin-14) (K14) (LOC729252), mRNA.	XR_015937.1	8.42	9.43	1.01	7.14
ILMN_1672589	SEMA4B	sema domain, immunoglobulin domain (Ig), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 4B (SEMA4B), mRNA.	NM_198925.1	10.54	9.86	-0.68	7.1
ILMN_1666819	PHLDB1	pleckstrin homology-like domain, family B, member 1 (PHLDB1), mRNA.	NM_015157.1	11	11.77	0.77	7.1
ILMN_1752269	ACSS1	acyl-CoA synthetase short-chain family member 1 (ACSS1), nuclear gene encoding mitochondrial protein, mRNA.	NM_032501.2	6.84	6	-0.84	7.09
ILMN_2358541	RBMS1	RNA binding motif, single stranded interacting protein 1 (RBMS1), transcript variant 3, mRNA.	NM_002897.3	8.54	9.35	0.81	7.04
ILMN_1753490	C10orf39	chromosome 10 open reading frame 39 (C10orf39), mRNA.	NM_194303.1	6.92	6.14	-0.78	7.03
ILMN_1767662	LASS6	LAG1 homolog, ceramide synthase 6 (LASS6), mRNA.	NM_203463.1	12.1	11.15	-0.95	7.01
ILMN_1792409	AMOT	angiomin (AMOT), transcript variant 2, mRNA.	NM_133265.2	9.06	7.57	-1.49	6.99
ILMN_2267535	NET1	neuroepithelial cell transforming gene 1 (NET1), transcript variant 2, mRNA.	NM_005863.3	8.86	9.84	0.98	6.99
ILMN_1657679	VAV3	vav 3 guanine nucleotide exchange factor (VAV3), transcript variant 1, mRNA.	NM_006113.4	10.01	8.8	-1.22	6.95
ILMN_1775519	ITGB7	integrin, beta 7 (ITGB7), mRNA.	NM_000889.1	8.63	7.78	-0.85	6.91
ILMN_1751034	LOC162073	hypothetical protein LOC162073 (LOC162073), mRNA.	NM_001034841.2	11.66	12.51	0.86	6.89
ILMN_2233334	MYH16	myosin, heavy chain 16 pseudogene (MYH16) on chromosome 7.	NR_002147.2	6.47	7.26	0.79	6.88
ILMN_1681890	DYNLT3	dynein, light chain, Tctex-type 3 (DYNLT3), mRNA.	NM_006520.1	9.4	10.42	1.02	6.85
ILMN_1779190	ALKB8	alkB, alkyltransfer repair homolog 8 (E. coli) (ALKB8), mRNA.	NM_138775.1	8.86	9.94	1.08	6.83
ILMN_1680591	RTKN	rhotekin (RTKN), transcript variant 2, mRNA.	NM_033046.2	11.03	11.76	0.73	6.82
ILMN_1682599	GPRC5A	G protein-coupled receptor, family C, group 5, member A (GPRC5A), mRNA.	NM_003979.3	7.9	8.86	0.96	6.8
ILMN_2129572	F3	coagulation factor III (thromboplastin, tissue factor) (F3), mRNA.	NM_001993.2	10.53	11.35	0.81	6.79
ILMN_1790228	FURIN	furin (paired basic amino acid cleaving enzyme) (FURIN), mRNA.	NM_002569.2	7.4	8.17	0.77	6.75
ILMN_1672660	MBP	myelin basic protein (MBP), transcript variant 8, mRNA.	NM_001025100.1	11.76	11.09	-0.67	6.73
ILMN_2162253	NMU	neuromedin U (NMU), mRNA.	NM_006681.1	11.82	11.07	-0.75	6.73
ILMN_1739594	ACOT11	acyl-CoA thioesterase 11 (ACOT11), transcript variant 2, mRNA.	NM_147161.2	9.24	9.94	0.69	6.72
ILMN_1849494		clone 24841 mRNA sequence		6.2	7.09	0.89	6.69
ILMN_1741404	MSC	musculin (activated B-cell factor-1) (MSC), mRNA.	NM_005098.3	6.04	6.8	0.76	6.67
ILMN_1727805	SYNGR1	synaptogyrin 1 (SYNGR1), transcript variant 1a, mRNA.	NM_004711.3	6.73	6	-0.74	6.66
ILMN_2399523	JAG2	jagged 2 (JAG2), transcript variant 2, mRNA.	NM_145159.1	9.45	8.54	-0.91	6.64
ILMN_1779547	HPSE	heparanase (HPSE), mRNA.	NM_006665.2	7.66	6.76	-0.9	6.58
ILMN_1694268	HESE	hairy and enhancer of split 6 (Drosophila) (HESE), mRNA.	NM_018645.3	8.2	9.08	0.88	6.54
ILMN_2338323	CDC25B	cell division cycle 25 homolog B (S. pombe) (CDC25B), transcript variant 2, mRNA.	NM_004358.3	12.04	11.19	-0.85	6.51
ILMN_1785618	SMTN	smoothelin (SMTN), transcript variant 3, mRNA.	NM_006932.3	7.52	8.45	0.93	6.51
ILMN_1779252	TRIM22	tripartite motif-containing 22 (TRIM22), mRNA.	NM_006074.3	7.44	6.46	-0.98	6.49
ILMN_1809613	NGEF	neuronal guanine nucleotide exchange factor (NGEF), mRNA.	NM_019850.1	7.39	8.27	0.88	6.49
ILMN_1724040	ANKRD57	ankyrin repeat domain 57 (ANKRD57), mRNA.	NM_023016.3	11.04	11.68	0.64	6.47
ILMN_1659599	ADC	arginine decarboxylase (ADC), mRNA.	NM_052998.2	7.35	8.09	0.74	6.44
ILMN_1699989	BNIP1	BCL2/adrenovirus E1B 19kD interacting protein like (BNIP1), mRNA.	NM_138278.2	8.6	7.64	-0.96	6.42
ILMN_2199439	CA2	carbonic anhydrase II (CA2), mRNA.	NM_000067.1	13.25	12.61	-0.64	6.42
ILMN_2117323	PIK3C2B	phosphoinositide-3-kinase, class 2, beta polypeptide (PIK3C2B), mRNA.	NM_002646.2	9.2	8.29	-0.91	6.4
ILMN_1659761	SNX29	sorting nexin 29 (SNX29), mRNA.	NM_001080530.2	9	9.66	0.66	6.4
ILMN_2391150	FILIP1L	filamin A interacting protein 1-like (FILIP1L), transcript variant 3, mRNA.	NM_001042459.1	7.39	8.2	0.81	6.36
ILMN_1732410	SLC16A9	solute carrier family 16, member 9 (monocarboxylic acid transporter 9) (SLC16A9), mRNA.	NM_194298.1	7.57	6.74	-0.83	6.35
ILMN_1788203	HEY1	hairy/enhancer-of-split related with YRPW motif 1 (HEY1), transcript variant 2, mRNA.	NM_001040708.1	7.79	8.57	0.78	6.35
ILMN_1748591	ODC1	ornithine decarboxylase 1 (ODC1), mRNA.	NM_002539.1	10.86	11.53	0.68	6.34
ILMN_2137789	KLF4	Kruppel-like factor 4 (gut) (KLF4), mRNA.	NM_004235.3	8.5	9.24	0.74	6.33
ILMN_1777591	C10orf65	chromosome 10 open reading frame 65 (C10orf65), mRNA.	NM_138413.2	7.75	6.66	-1.09	6.32
ILMN_1787718	SLC27A1	solute carrier family 27 (fatty acid transporter), member 1 (SLC27A1), mRNA.	NM_198580.1	8.66	7.83	-0.83	6.3
ILMN_2325185	TYSDN1	trypsin domain containing 1 (TYSDN1), transcript variant 1, mRNA.	NM_173555.2	8.03	7.17	-0.87	6.3
ILMN_1859908		cDNA clone MGC:13035 IMAGE:3613409, complete cds		9.3	8.67	-0.63	6.3
ILMN_2357730	CCRK	cell cycle related kinase (CCRK), transcript variant 2, mRNA.	NM_012119.3	8.99	8.4	-0.59	6.3
ILMN_1753613	HOXA5	homeobox A5 (HOXA5), mRNA.	NM_019102.2	11.42	10.84	-0.59	6.3

**Supplement 2: TGFb Signature - significantly regulated genes upon 4h TGFb stimulation of HaCaT cells**

Illumina Identifier	HGNC gene symbol	Gene Description	Refseq ID	UT 4h	UT+TGFb 4h	LR +/- TGFb 4h	-log10 pVal LR +/- TGFb 4h
ILMN_2172174	NP	nucleoside phosphorylase (NP), mRNA.	NM_000270.1	9.95	10.72	0.77	6.3
ILMN_2162799	AHR	aryl hydrocarbon receptor (AHR), mRNA.	NM_001621.3	7.65	8.42	0.78	6.3
ILMN_1704571	FAM53B	family with sequence similarity 53, member B (FAM53B), mRNA.	NM_014661.3	9.12	8.31	-0.81	6.26
ILMN_1782050	CEBPD	CCAAT/enhancer binding protein (C/EBP), delta (CEBPD), mRNA.	NM_005195.3	9.52	8.88	-0.64	6.26
ILMN_1811579	HOMER3	homer homolog 3 (Drosophila) (HOMER3), mRNA.	NM_004838.2	8.93	9.58	0.65	6.26
ILMN_1680774	LOC730994	PREDICTED: similar to NACHT, leucine rich repeat and PYD (pyrin domain) containing 1, transcript variant 1 (LOC730994), mRNA.	XM_001132373.1	6.21	7.11	0.9	6.26
ILMN_1895660		K-EST0058554 S13KMS5s1 cDNA clone S13KMS5s1-7-G08 5, mRNA sequence		5.73	6.63	0.9	6.25
ILMN_1723035	OLR1	oxidized low density lipoprotein (lectin-like) receptor 1 (OLR1), mRNA.	NM_002543.3	10.48	11.36	0.88	6.22
ILMN_1849117		mRNA full length insert cDNA clone EUROIIMAGE 151432		7.32	6.53	-0.79	6.21
ILMN_1747650	BMP6	bone morphogenetic protein 6 (BMP6), mRNA.	NM_001718.4	6.04	7.05	1.01	6.2
ILMN_2289093	KIAA1618	KIAA1618 (KIAA1618), mRNA.	NM_020954.2	7.26	7.89	0.63	6.19
ILMN_2374249	DYRK2	dual-specificity tyrosine-(Y)-phosphorylation regulated kinase 2 (DYRK2), transcript variant 1, mRNA.	NM_003583.2	9.66	10.31	0.65	6.17
ILMN_1700081	FST	folistatin (FST), transcript variant FST344, mRNA.	NM_013409.1	12.09	12.87	0.78	6.17
ILMN_1758250	TRAFD1	TRAF-type zinc finger domain containing 1 (TRAFD1), mRNA.	NM_006700.1	9.58	8.66	-0.91	6.14
ILMN_2072357	IRF6	interferon regulatory factor 6 (IRF6), mRNA.	NM_006147.2	9.63	10.38	0.75	6.14
ILMN_1669617	GRB10	growth factor receptor-bound protein 10 (GRB10), transcript variant 4, mRNA.	NM_001001555.1	6.48	7.33	0.85	6.13
ILMN_2308903	WFDC3	WAP four-disulfide core domain 3 (WFDC3), transcript variant 2, mRNA.	NM_181522.1	8.38	7.3	-1.08	6.12
ILMN_1655229	SLC7A11	solute carrier family 7, (cationic amino acid transporter, y+ system) member 11 (SLC7A11), mRNA.	NM_014331.3	7.07	7.85	0.78	6.08
ILMN_1727689	TNFAIP2	tumor necrosis factor, alpha-induced protein 2 (TNFAIP2), mRNA.	NM_006291.2	7.2	6.31	-0.89	6.06
ILMN_1724211	GPCR5C	G protein-coupled receptor, family C, group 5, member C (GPCR5C), transcript variant 1, mRNA.	NM_022036.2	8.39	7.55	-0.84	6.06
ILMN_1757298	BTBD7	BTB (POZ) domain containing 7 (BTBD7), transcript variant 2, mRNA.	NM_018167.3	7.85	8.6	0.75	6.06
ILMN_2230566	RAB40B	RAB40B, member RAS oncogene family (RAB40B), mRNA.	NM_006822.1	10.92	10.23	-0.69	6.05
ILMN_1660691	RAB31	RAB31, member RAS oncogene family (RAB31), mRNA.	NM_006868.2	10.11	10.8	0.68	6.01
ILMN_1774874	IL1RN	interleukin 1 receptor antagonist (IL1RN), transcript variant 4, mRNA.	NM_173843.1	10.38	9.61	-0.77	6
ILMN_1672662	SLC20A1	solute carrier family 20 (phosphate transporter), member 1 (SLC20A1), mRNA.	NM_005415.3	11.08	10.09	-0.99	6
ILMN_1754943	MYO1E	myosin IE (MYO1E), mRNA.	NM_004998.2	6.49	7.26	0.78	5.98
ILMN_1784602	CDKN1A	cyclin-dependent kinase inhibitor 1A (p21, Cip1) (CDKN1A), transcript variant 1, mRNA.	NM_000389.2	11.22	11.83	0.61	5.96
ILMN_1770505	BIK	BCL2-interacting killer (apoptosis-inducing) (BIK), mRNA.	NM_001197.3	8.62	7.76	-0.86	5.95
ILMN_1910330		BX116720 Soares' testis NHT cDNA clone IMAGp998F241782, mRNA sequence		8.01	8.66	0.65	5.95
ILMN_1774077	GBP2	guanylate binding protein 2, interferon-inducible (GBP2), mRNA.	NM_004120.3	7.71	6.75	-0.97	5.92
ILMN_1651498	GADD45G	growth arrest and DNA-damage-inducible, gamma (GADD45G), mRNA.	NM_006705.2	7.8	8.64	0.84	5.88
ILMN_1729987	SRC	v-src sarcoma (Schmidt-Ruppin A-2) viral oncogene homolog (avian) (SRC), transcript variant 2, mRNA.	NM_198291.1	8.85	9.64	0.8	5.88
ILMN_2185984	SASH1	SAM and SH3 domain containing 1 (SASH1), mRNA.	NM_015278.3	8.76	7.92	-0.84	5.87
ILMN_2381257	DSC2	desmocollin 2 (DSC2), transcript variant Dsc2a, mRNA.	NM_024422.2	9.22	9.99	0.77	5.87
ILMN_1675048	IGF1R	insulin-like growth factor 1 receptor (IGF1R), mRNA.	NM_000875.2	6.64	7.46	0.82	5.87
ILMN_1824362		BX105338 Soares' pregnant, uterus NHPHU cDNA clone IMAGp998C114347, mRNA sequence		7.81	8.74	0.93	5.86
ILMN_1671731	AVP1	arginine vasopressin-induced 1 (AVP1), mRNA.	NM_021732.1	11.83	11.23	-0.59	5.82
ILMN_1692539	SH3BP1	SH3-domain binding protein 1 (SH3BP1), mRNA.	NM_018957.3	8.54	7.76	-0.78	5.82
ILMN_1796461	PRSS8	protease, serine, 8 (PRSS8), mRNA.	NM_002773.3	10.96	10.1	-0.85	5.79
ILMN_1765187	LHB	luteinizing hormone beta polypeptide (LHB), mRNA.	NM_000894.2	5.91	6.75	0.85	5.79
ILMN_1739161	PPAP2A	phosphatidic acid phosphatase type 2A (PPAP2A), transcript variant 1, mRNA.	NM_003711.2	6.95	7.66	0.72	5.77
ILMN_1777853	MBOAT2	PREDICTED: membrane bound O-acyltransferase domain containing 2 (MBOAT2), mRNA.	XM_001129292.1	7.01	7.87	0.86	5.76
ILMN_1702933	ADM2	adrenomedullin 2 (ADM2), mRNA.	NM_024866.4	8.33	9.1	0.76	5.75
ILMN_1754753	IL6R	interleukin 6 receptor (IL6R), transcript variant 1, mRNA.	NM_000565.2	6.7	5.93	-0.77	5.74
ILMN_1669982	CCDC85A	coiled-coil domain containing 85A (CCDC85A), mRNA.	NM_001080433.1	7.31	8.23	0.92	5.73
ILMN_1730928	CDK5R1	cyclin-dependent kinase 5, regulatory subunit 1 (p35) (CDK5R1), mRNA.	NM_003885.2	6.74	7.58	0.84	5.73
ILMN_1903914		cDNA FLJ21688 fis, clone ADG04821		7.55	8.47	0.92	5.71
ILMN_1715650	LOC648149	PREDICTED: hypothetical protein LOC648149 (LOC648149), mRNA.	XM_939208.2	6.1	6.97	0.88	5.65
ILMN_1669390	PPP1R13L	protein phosphatase 1, regulatory (inhibitor) subunit 13 like (PPP1R13L), mRNA.	NM_006663.2	8.86	9.74	0.88	5.65
ILMN_2371458	CXCR7	chemokine (C-X-C motif) receptor 7 (CXCR7), transcript variant 1, mRNA.	NM_001047841.1	9.81	10.59	0.78	5.64
ILMN_1659544	STX3	syntaxin 3 (STX3), mRNA.	NM_004177.3	10	9.35	-0.65	5.63
ILMN_1784661	TMEM2	transmembrane protein 2 (TMEM2), mRNA.	NM_013390.1	9.06	9.82	0.76	5.63
ILMN_2157099	CCNA1	cyclin A1 (CCNA1), mRNA.	NM_003914.2	7.35	7.99	0.64	5.6
ILMN_1826572		cDNA FLJ37243 fis, clone BRAMY2004387		6.09	6.74	0.66	5.6
ILMN_1870668		NISC_gi03f04.y1 NCJ CGAP Pr28 cDNA clone IMAGE:3270678 5, mRNA sequence		7.18	6.54	-0.65	5.59
ILMN_1702255	KCNT1	potassium channel, subfamily T, member 1 (KCNT1), mRNA.	NM_020822.1	5.48	6.22	0.74	5.59
ILMN_1798543	STK17B	serine/threonine kinase 17b (STK17B), mRNA.	NM_004226.2	6.9	7.7	0.8	5.58
ILMN_1780132	PEL1	pellino homolog 2 (Drosophila) (PEL1), mRNA.	NM_021255.2	7.65	6.6	-1.05	5.56
ILMN_2370208	CMTM3	CKLF-like MARVEL transmembrane domain containing 3 (CMTM3), transcript variant 5, mRNA.	NM_001048251.1	6.62	7.42	0.8	5.56
ILMN_1668345	OAF	OAF homolog (Drosophila) (OAF), mRNA.	NM_178507.2	9.4	8.68	-0.72	5.55
ILMN_1814686	BCMO1	beta-carotene 15,15'-monooxygenase 1 (BCMO1), mRNA.	NM_017429.2	6.43	5.82	-0.61	5.55
ILMN_1735038		39875 membrane-associated ring finger (C3HC4) 3 (MARCH3), mRNA.	NM_178450.2	6.14	6.92	0.78	5.54
ILMN_1713803	LOC400566	hypothetical gene supported by AK128660 (LOC400566), mRNA.	NM_001013672.3	8.93	9.59	0.66	5.53
ILMN_1675448	ZFP36L1	zinc finger protein 36, C3H type-like 1 (ZFP36L1), mRNA.	NM_004926.2	10.96	11.62	0.66	5.52
ILMN_1685699	PRSS3	protease, serine, 3 (mesotrypsin) (PRSS3), mRNA.	NM_002771.2	9.2	9.78	0.58	5.51
ILMN_1740571	LOC647859	PREDICTED: similar to Occludin (LOC647859), mRNA.	XM_001130815.1	9.06	8.3	-0.76	5.48
ILMN_2400648	SRGAP3	SLIT-ROBO Rho GTPase activating protein 3 (SRGAP3), transcript variant 2, mRNA.	NM_001033117.1	6.74	6	-0.74	5.46
ILMN_1695687	SALL4	sal-like 4 (Drosophila) (SALL4), mRNA.	NM_020436.2	7.53	8.28	0.75	5.46
ILMN_1702899	PLEKH7	pleckstrin homology domain containing, family A member 7 (PLEKH7), mRNA.	NM_175058.3	8	7.39	-0.61	5.43
ILMN_1651347	SERTAD2	SERTA domain containing 2 (SERTAD2), mRNA.	NM_014755.1	10.95	10.4	-0.55	5.39
ILMN_1775501	IL18	interleukin 1, beta (IL18), mRNA.	NM_000576.2	7.31	6.57	-0.74	5.39
ILMN_2136089	MTE	metallothionein E (MTE), mRNA.	NM_175621.2	11.22	10.64	-0.59	5.38
ILMN_2298301	BNC1	basonuclin 1 (BNC1), mRNA.	NM_001717.2	8.65	9.48	0.83	5.36
ILMN_1811264	CCDC32	coiled-coil domain containing 32 (CCDC32), transcript variant 2, mRNA.	NM_052849.2	10.82	11.41	0.59	5.36
ILMN_1788377	COL27A1	collagen, type XXVII, alpha 1 (COL27A1), mRNA.	NM_032888.2	6.19	7.05	0.86	5.36
ILMN_1679837	SGPP1	sphingosine-1-phosphate phosphatase 1 (SGPP1), mRNA.	NM_030791.2	7.86	6.98	-0.87	5.35
ILMN_2071826	RNF152	ring finger protein 152 (RNF152), mRNA.	NM_173557.2	7.32	8.04	0.72	5.35
ILMN_1702501	RP56KA2	ribosomal protein S6 kinase, 90kDa, polypeptide 2 (RP56KA2), transcript variant 2, mRNA.	NM_001006932.1	8.58	9.16	0.58	5.34
ILMN_1910948		mRNA; cDNA DKFZp686j1595 (from clone DKFZp686j1595)		7.04	7.97	0.92	5.33
ILMN_1722156	RWDD2A	RWD domain containing 2A (RWDD2A), mRNA.	NM_033411.2	8.17	8.83	0.66	5.33
ILMN_2364022	SLC16A3	solute carrier family 16, member 3 (monocarboxylic acid transporter 4) (SLC16A3), transcript variant 2, mRNA.	NM_004207.2	8.52	9.26	0.73	5.32
ILMN_1813386	CORO6	coronin 6 (CORO6), mRNA.	NM_032854.2	7.53	8.37	0.84	5.29
ILMN_1792076	TRERF1	transcriptional regulating factor 1 (TRERF1), mRNA.	NM_033502.1	9.07	8.25	-0.82	5.26
ILMN_1665832	ID1	inhibitor of DNA binding 1, dominant negative helix-loop-helix protein (ID1), transcript variant 2, mRNA.	NM_181353.1	7.67	6.69	-0.98	5.25
ILMN_1656826	SH3RF1	SH3 domain containing ring finger 1 (SH3RF1), mRNA.	NM_020870.3	8.03	9.05	1.01	5.25
ILMN_1776602	RNASE4	ribonuclease, RNase A family, 4 (RNASE4), transcript variant 3, mRNA.	NM_194431.1	7.85	7.16	-0.69	5.23
ILMN_1658798	MEGF9	multiple EGF-like domains 9 (MEGF9), mRNA.	NM_001080497.1	6.67	7.48	0.8	5.23
ILMN_1799320	C9orf37	chromosome 9 open reading frame 37 (C9orf37), mRNA.	NM_032937.3	7.52	8.23	0.71	5.22
ILMN_2043452	FANCE	Fanconi anemia, complementation group E (FANCE), mRNA.	NM_021922.2	9.16	8.55	-0.61	5.2
ILMN_1684653	GPR115	G protein-coupled receptor 115 (GPR115), mRNA.	NM_153838.3	5.93	6.94	1.01	5.2
ILMN_1686562	KIF13B	kinesin family member 13B (KIF13B), mRNA.	NM_015254.2	7.45	8.02	0.56	5.2
ILMN_1792978	HAS2	hyaluronan synthase 2 (HAS2), mRNA.	NM_005328.1	6.65	7.4	0.75	5.18
ILMN_2044453	LPAR5	lysophosphatidic acid receptor 5 (LPAR5), mRNA.	NM_020400.4	10.05	10.63	0.59	5.18
ILMN_2396444	CD14	CD14 molecule (CD14), transcript variant 2, mRNA.	NM_001040021.1	8.08	7.34	-0.74	5.17
ILMN_2239774	FAM83A	family with sequence similarity 83, member A (FAM83A), transcript variant 1, mRNA.	NM_032899.4	8.06	8.99	0.93	5.17
ILMN_1718766	MT1F	metallothionein 1F (MT1F), mRNA.	NM_005949.2	11.74	11.19	-0.55	5.16
ILMN_1730294	C18orf37	chromosome 18 open reading frame 37 (C18orf37), transcript variant 2, mRNA.	NM_194281.3	9.32	9.96	0.64	5.16
ILMN_1706344	ABHD6	abhydrolase domain containing 6 (ABHD6), mRNA.	NM_020676.4	7.98	7.27	-0.71	5.15
ILMN_2094952	NUAK2	NUAK family, SNF1-like kinase, 2 (NUAK2), mRNA.	NM_030952.1	7.25	7.91	0.66	5.14
ILMN_1870041		partial mRNA; ID YG39-1C		6.73	7.56	0.82	5.13
ILMN_1719792	PHLDB2	pleckstrin homology-like domain, family B, member 2 (PHLDB2), mRNA.	NM_145753.1	7.97	8.94	0.97	5.13
ILMN_1753413	TRIOBP	TRIO and F-actin binding protein (TRIOBP), transcript variant 2, mRNA.	NM_138632.2	7.89	8.67	0.77	5.13
ILMN_1679267	TGM2	transglutaminase 2 (C polypeptide, protein-glutamine-gamma-glutamyltransferase) (TGM2), transcript variant 2, mRNA.	NM_198951.1	5.77	6.51	0.74	5.13

**Supplement 2: TGFb Signature - significantly regulated genes upon 4h TGFb stimulation of HaCaT cells**

Illumina Identifier	HGNC gene symbol	Gene Description	Refseq ID	UT 4h	UT+TGFb 4h	LR +/- TGFb 4h	-log10 pVAL LR +/- TGFb 4h
ILMN_1823809		cDNA: FLJ12429 fis, clone COL04205		8.67	9.48	0.8	5.13
ILMN_1760727	ANG	angiogenin, ribonuclease, RNase A family, 5 (ANG), transcript variant 2, mRNA.	NM_001097577.1	9.05	8.41	-0.65	5.12
ILMN_1741032	HERC3	hect domain and RLD 3 (HERC3), mRNA.	NM_014606.1	6.39	7.3	0.91	5.08
ILMN_2387090	CGGBP1	CGG triplet repeat binding protein 1 (CGGBP1), transcript variant 2, mRNA.	NM_003663.3	9.96	10.51	0.55	5.07
ILMN_1697561	FBXL16	F-box and leucine-rich repeat protein 16 (FBXL16), mRNA.	NM_153350.2	7.93	7.15	-0.78	5.05
ILMN_1900110		BX099724 Soares fetal liver spleen 1N1FLS S1 cDNA clone IMAGp998F201004, mRNA sequence		6.43	7.18	0.76	5.05
ILMN_2367469	CARS	cysteinyI-tRNA synthetase (CARS), transcript variant 4, mRNA.	NM_001014438.1	10.94	11.66	0.72	5.05
ILMN_2382290	KREMEN2	kringle containing transmembrane protein 2 (KREMEN2), transcript variant 2, mRNA.	NM_024507.2	8.06	7.39	-0.68	5.04
ILMN_1773959	ST6GALNAC5	ST6 (alpha-N-acetyl-neuraminyl-2,3-beta-galactosyl-1,3)-N-acetylglucosaminide alpha-2,6-sialyltransferase 5 (ST6GALNAC5)	NM_030965.1	7.4	8.2	0.8	5.03
ILMN_1749875	LOC228715	PREDICTED: similar to hCG38149 (LOC228715), mRNA.	XM_001128260.1	9.53	8.76	-0.77	5.02
ILMN_2087692	CYBRD1	cytochrome b reductase 1 (CYBRD1), mRNA.	NM_024843.2	8.76	7.93	-0.83	5.01
ILMN_2283597	FAM134B	family with sequence similarity 134, member B (FAM134B), transcript variant 1, mRNA.	NM_001034850.1	7.02	6.17	-0.84	5
ILMN_2383611	PTPRE	protein tyrosine phosphatase, receptor type, E (PTPRE), transcript variant 2, mRNA.	NM_130435.2	8.86	8.24	-0.63	5
ILMN_2109708	ECGF1	endothelial cell growth factor 1 (platelet-derived) (ECGF1), mRNA.	NM_001953.2	10.26	10.83	0.57	5
ILMN_1738546	LOC400578	PREDICTED: similar to Keratin, type I cytoskeletal 14 (Cytokeratin-14) (CK-14) (Keratin-14) (K14) (LOC400578), mRNA.	XR_017543.1	7.14	8.03	0.88	5
ILMN_1737184	CDC47	cell division cycle associated 7 (CDC47), transcript variant 1, mRNA.	NM_031942.4	11.47	10.76	-0.71	4.99
ILMN_1723678	PRPH	peripherin (PRPH), mRNA.	NM_006262.3	7.2	6.55	-0.65	4.97
ILMN_2053415	LDLR	low density lipoprotein receptor (familial hypercholesterolemia) (LDLR), mRNA.	NM_000527.2	11.72	11.06	-0.66	4.94
ILMN_1723522	APOLD1	apolipoprotein L domain containing 1 (APOLD1), mRNA.	NM_030817.1	7.52	6.72	-0.8	4.93
ILMN_1656285	METTL7A	methyltransferase like 7A (METTL7A), mRNA.	NM_014033.3	7.56	6.66	-0.9	4.92
ILMN_1776181	BIRC3	baculoviral IAP repeat-containing 3 (BIRC3), transcript variant 1, mRNA.	NM_001165.3	7.17	6.41	-0.76	4.92
ILMN_1763265	CHMP1B	chromatin modifying protein 1B (CHMP1B), mRNA.	NM_020412.3	10.04	10.57	0.53	4.91
ILMN_1773963	GNA15	guanine nucleotide binding protein (G protein), alpha 15 (Gq class) (GNA15), mRNA.	NM_002068.1	10.63	11.21	0.58	4.91
ILMN_1776724	LYPD6	LY6/PLAUR domain containing 6 (LYPD6), mRNA.	NM_194317.2	7.51	6.85	-0.66	4.9
ILMN_1743232	MICALCL	MICAL C-terminal like (MICALCL), mRNA.	NM_032867.2	7.38	8.17	0.79	4.87
ILMN_1739582	HoxA9	homeobox A9 (HoxA9), mRNA.	NM_152739.3	11.77	11.24	-0.53	4.81
ILMN_1702858	ADHFE1	alcohol dehydrogenase, iron containing, 1 (ADHFE1), mRNA.	NM_144650.2	7.56	6.97	-0.59	4.81
ILMN_1692295	MYO1G	myosin IG (MYO1G), mRNA.	NM_033054.1	5.93	6.58	0.65	4.8
ILMN_2324421	TXNRD1	thioredoxin reductase 1 (TXNRD1), transcript variant 4, mRNA.	NM_182743.1	10.09	9.2	-0.89	4.79
ILMN_1715991	SDPR	serum deprivation response (phosphatidylserine binding protein) (SDPR), mRNA.	NM_004657.4	7.17	6.54	-0.63	4.79
ILMN_1710937	IFI16	interferon, gamma-inducible protein 16 (IFI16), mRNA.	NM_005531.1	11.21	10.59	-0.62	4.78
ILMN_1753730	ABTB2	ankyrin repeat and BTB (POZ) domain containing 2 (ABTB2), mRNA.	NM_145804.1	6.56	7.4	0.84	4.78
ILMN_1758719	NEDD9	neural precursor cell expressed, developmentally down-regulated 9 (NEDD9), transcript variant 1, mRNA.	NM_006403.2	6.96	7.74	0.78	4.77
ILMN_1756953	GBP6	guanylate binding protein family, member 6 (GBP6), mRNA.	NM_198460.1	9.02	8.29	-0.73	4.76
ILMN_1794017	SERTAD1	SERTA domain containing 1 (SERTAD1), mRNA.	NM_013376.3	9.34	9.87	0.53	4.75
ILMN_1752755	VWF	von Willebrand factor (VWF), mRNA.	NM_000552.3	6.83	6.11	-0.72	4.74
ILMN_1782141	GRHL3	grainyhead-like 3 (Drosophila) (GRHL3), transcript variant 1, mRNA.	NM_021180.2	7.6	6.8	-0.8	4.74
ILMN_1685122	COL9A2	collagen, type IX, alpha 2 (COL9A2), mRNA.	NM_001852.3	6.1	6.74	0.65	4.73
ILMN_2397750	IVNS1ABP	influenza virus NS1A binding protein (IVNS1ABP), mRNA.	NM_006469.4	9.19	10.36	1.18	4.73
ILMN_1743933	TSHZ3	teashirt zinc finger homeobox 3 (TSHZ3), mRNA.	NM_020856.2	6.26	7.08	0.82	4.69
ILMN_1823850		RST21348 Athersys RAGE Library cDNA, mRNA sequence		6.59	7.67	1.08	4.68
ILMN_1759175	DUSP10	dual specificity phosphatase 10 (DUSP10), transcript variant 1, mRNA.	NM_007207.3	7.81	7.23	-0.58	4.66
ILMN_1656422	GPR87	G protein-coupled receptor 87 (GPR87), mRNA.	NM_023915.2	8.49	9.33	0.83	4.64
ILMN_1806607	SFN	stratifin (SFN), mRNA.	NM_006142.3	12	12.56	0.56	4.61
ILMN_1700935	HAS2	hyaluronan synthase 2 (HAS2), mRNA.	NM_005328.1	6.09	6.67	0.58	4.61
ILMN_1729095	PDZD2	PDZ domain containing 2 (PDZD2), mRNA.	NM_178140.2	7.95	7.2	-0.75	4.6
ILMN_1813374	C19orf28	chromosome 19 open reading frame 28 (C19orf28), transcript variant 3, mRNA.	NM_174983.3	6.68	7.44	0.76	4.6
ILMN_1684183	RAD9A	RAD9 homolog A (S. pombe) (RAD9A), mRNA.	NM_004584.2	8.83	8.15	-0.68	4.59
ILMN_1854132		BX098874 Soares NIHMPu S1 cDNA clone IMAGp998D154543, mRNA sequence		8.56	7.81	-0.75	4.59
ILMN_2228938	ECM2	extracellular matrix protein 2, female organ and adipocyte specific (ECM2), mRNA.	NM_001393.2	8.86	8.27	-0.59	4.58
ILMN_1657870	ABL2	v-abl Abelson murine leukemia viral oncogene homolog 2 (arg. Abelson-related gene) (ABL2), transcript variant a, mRNA.	NM_005158.3	6.36	7.25	0.89	4.58
ILMN_2257607	STARD13	START domain containing 13 (STARD13), transcript variant alpha, mRNA.	NM_178006.1	8.2	9.05	0.84	4.58
ILMN_2097997	IFNE1	interferon epsilon 1 (IFNE1), mRNA.	NM_176891.3	6.44	7.25	0.81	4.57
ILMN_1661628	LOC653110	PREDICTED: similar to annexin A8, transcript variant 1 (LOC653110), mRNA.	XM_926584.1	12.32	13.1	0.78	4.57
ILMN_1683470	TMEM139	transmembrane protein 139 (TMEM139), mRNA.	NM_153345.1	7.64	7.03	-0.61	4.56
ILMN_1900520		602659965F1 NCJ CGAP Skn3 cDNA clone IMAGE:4802969 5, mRNA sequence		9.96	10.56	0.6	4.55
ILMN_1707312	NFIL3	nuclear factor, interleukin 3 regulated (NFIL3), mRNA.	NM_005384.2	7.2	8.12	0.91	4.52
ILMN_2340919	GRB10	growth factor receptor-bound protein 10 (GRB10), transcript variant 1, mRNA.	NM_005311.3	5.87	6.51	0.64	4.47
ILMN_1705384	PPFIBP1	PTPR interacting protein, binding protein 1 (liprin beta 1) (PPFIBP1), transcript variant 2, mRNA.	NM_177444.1	8.03	8.69	0.66	4.47
ILMN_1701789	IFIT3	interferon-induced protein with tetratricopeptide repeats 3 (IFIT3), mRNA.	NM_001031683.1	8.69	7.67	-1.03	4.46
ILMN_1658494	C13orf15	chromosome 13 open reading frame 15 (C13orf15), mRNA.	NM_014059.2	8.8	8.24	-0.56	4.45
ILMN_2393835	PTGS1	prostaglandin-endoperoxide synthase 1 (prostaglandin G/H synthase and cyclooxygenase) (PTGS1), transcript variant 2, mRNA	NM_080591.1	8.57	7.92	-0.65	4.44
ILMN_1741200	RFX5	regulatory factor X, 5 (influences HLA class II expression) (RFX5), transcript variant 2, mRNA.	NM_001025603.1	10.74	10.06	-0.67	4.44
ILMN_1779234	CXCL6	chemokine (C-X-C motif) ligand 6 (granulocyte chemotactic protein 2) (CXCL6), mRNA.	NM_002993.2	7.81	8.44	0.63	4.44
ILMN_1713934	LITAF	lipopolysaccharide-induced TNF factor (LITAF), mRNA.	NM_004862.2	12.01	12.59	0.58	4.44
ILMN_2390310	C17orf91	chromosome 17 open reading frame 91 (C17orf91), transcript variant 2, mRNA.	NM_001001870.1	9.82	10.42	0.61	4.43
ILMN_1731224	PARP9	poly (ADP-ribose) polymerase family, member 9 (PARP9), mRNA.	NM_031458.1	9.12	8.25	-0.87	4.41
ILMN_2093343	PLAC8	placenta-specific 8 (PLAC8), mRNA.	NM_016619.1	8.01	7.41	-0.6	4.4
ILMN_2068104	TFPI2	tissue factor pathway inhibitor 2 (TFPI2), mRNA.	NM_006528.2	6.75	7.4	0.66	4.4
ILMN_1751465	BNC1	basonuclin 1 (BNC1), mRNA.	NM_001717.2	8.76	9.5	0.74	4.37
ILMN_1761762	C6orf141	chromosome 6 open reading frame 141 (C6orf141), mRNA.	NM_153344.1	8.88	9.74	0.86	4.37
ILMN_1670111	CDKN2B	cyclin-dependent kinase inhibitor 2B (p15, inhibits CDK4) (CDKN2B), transcript variant 2, mRNA.	NM_078487.2	5.89	6.71	0.82	4.37
ILMN_1756992	MUC1	mucin 1, cell surface associated (MUC1), transcript variant 6, mRNA.	NM_001044391.1	9.41	8.86	-0.56	4.34
ILMN_1773742	DNAJB9	Dnaj (Hsp40) homolog, subfamily B, member 9 (DNAJB9), mRNA.	NM_012328.1	8.22	8.79	0.57	4.32
ILMN_1859787		BX105743 NCJ CGAP GC6 cDNA clone IMAGp998H135716, mRNA sequence		7.82	8.35	0.53	4.32
ILMN_1815745	SOX4	SRY (sex determining region Y)-box 4 (SOX4), mRNA.	NM_003107.2	7.36	8.21	0.84	4.31
ILMN_1698404	ERN1	endoplasmic reticulum to nucleus signalling 1 (ERN1), transcript variant 2, mRNA.	NM_152461.2	7.11	7.72	0.62	4.3
ILMN_2186983	ANXA8L2	annexin A8-like 2 (ANXA8L2), mRNA.	NM_001630.2	12.68	13.33	0.65	4.29
ILMN_1806502	ZNF165	zinc finger protein 165 (ZNF165), mRNA.	NM_003447.2	9.3	8.73	-0.57	4.28
ILMN_1668194	LMTK3	PREDICTED: lemur tyrosine kinase 3 (LMTK3), mRNA.	XM_936372.2	8.6	7.92	-0.67	4.28
ILMN_1703284	SPIRE2	spire homolog 2 (Drosophila) (SPIRE2), mRNA.	NM_032451.1	8.52	7.95	-0.56	4.26
ILMN_1904628		PM0-ST0264-161199-001-b06 ST0264 cDNA, mRNA sequence		7.5	6.8	-0.7	4.26
ILMN_1687768	NCOA7	nuclear receptor coactivator 7 (NCOA7), mRNA.	NM_181782.2	11.7	11.11	-0.59	4.26
ILMN_1792538	CD7	CD7 molecule (CD7), mRNA.	NM_006137.6	6.52	5.98	-0.54	4.26
ILMN_1654370	TESK2	testis-specific kinase 2 (TESK2), mRNA.	NM_007170.2	7.94	7.31	-0.63	4.25
ILMN_2360415	PRNP	prion protein (p27-30) (Creutzfeldt-Jakob disease, Gerstmann-Strausler-Scheinker syndrome, fatal familial insomnia) (PRNP), t	NM_183079.2	12.82	13.38	0.57	4.24
ILMN_1732404	C2orf15	chromosome 2 open reading frame 15 (C2orf15), mRNA.	NM_144706.2	8.93	8.3	-0.63	4.23
ILMN_1887357		cDNA FLJ38396 fis, clone FEBRA2007957		8.94	8.32	-0.62	4.22
ILMN_1693242	ZNF342	zinc finger protein 342 (ZNF342), mRNA.	NM_145288.1	9.19	8.6	-0.59	4.22
ILMN_1740903	C7orf49	chromosome 7 open reading frame 49 (C7orf49), mRNA.	NM_024033.1	8.55	9.22	0.67	4.22
ILMN_2329927	ABCG1	ATP-binding cassette, sub-family G (WHITE), member 1 (ABCG1), transcript variant 2, mRNA.	NM_016818.2	6.45	7.06	0.61	4.19
ILMN_1791580	FXD3	FXD domain containing ion transport regulator 3 (FXD3), transcript variant 1, mRNA.	NM_005971.2	9.48	8.91	-0.57	4.17
ILMN_1731064	CABC1	chaperone, ABC1 activity of bc1 complex homolog (S. pombe) (CABC1), nuclear gene encoding mitochondrial protein, mRNA.	NM_002024.4	9.1	8.53	-0.57	4.17
ILMN_1692177	TSC2D1	TSC2 domain family, member 1 (TSC2D1), transcript variant 2, mRNA.	NM_006022.2	10.35	10.92	0.57	4.17
ILMN_1728662	ALDH3B1	aldehyde dehydrogenase 3 family, member B1 (ALDH3B1), transcript variant 1, mRNA.	NM_000694.2	7.68	7.06	-0.63	4.16
ILMN_1826921		mRNA; cDNA DKFZp686B15184 (from clone DKFZp686B15184)		8.47	8.98	0.52	4.15
ILMN_1696974	ANG	angiogenin, ribonuclease, RNase A family, 5 (ANG), transcript variant 2, mRNA.	NM_001097577.1	7.71	6.96	-0.75	4.12
ILMN_1689200	DHDH	dihydrodiol dehydrogenase (dimeric) (DHDH), mRNA.	NM_014475.3	7.44	6.77	-0.67	4.1
ILMN_1686988	ST5	suppression of tumorigenicity 5 (ST5), transcript variant 3, mRNA.	NM_213618.1	7.27	7.95	0.68	4.08
ILMN_2384122	GPR56	G protein-coupled receptor 56 (GPR56), transcript variant 3, mRNA.	NM_201525.1	12.53	13.14	0.6	4.07
ILMN_2173919	MYO9A	myosin IXA (MYO9A), mRNA.	NM_006901.1	9.31	8.74	-0.58	4.05
ILMN_1660199	ACAA2	acetyl-Coenzyme A acyltransferase 2 (mitochondrial 3-oxoacyl-Coenzyme A thiolase) (ACAA2), nuclear gene encoding mitoch	NM_006111.1	6.37	7.1	0.73	4.04
ILMN_1746763	ECM2	extracellular matrix protein 2, female organ and adipocyte specific (ECM2), mRNA.	NM_001393.2	7.43	6.84	-0.59	4.02

**Supplement 2: TGFb Signature - significantly regulated genes upon 4h TGFb stimulation of HaCaT cells**

Illumina Identifier	HGNC gene symbol	Gene Description	Refseq ID	UT 4h	UT+TGFb 4h	LR +/- TGFb 4h	-log10 pVAL LR +/- TGFb 4h
ILMN_1801307	TNFSF10	tumor necrosis factor (ligand) superfamily, member 10 (TNFSF10), mRNA.	NM_003810.2	10.63	9.79	-0.84	4.02
ILMN_2043918	DLEU1	deleted in lymphocytic leukemia, 1 (DLEU1) on chromosome 13.	NR_002605.1	9.92	9.26	-0.66	4.01
ILMN_1658575	GALNT5	UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase 5 (GalNac-T5) (GALNT5), mRNA.	NM_014568.1	8.55	7.92	-0.63	4.01
ILMN_2287157	DST	dystonin (DST), transcript variant 1, mRNA.	NM_183380.1	7.24	8.01	0.77	4.01
ILMN_1745570	KLK7	kallikrein-related peptidase 7 (KLK7), transcript variant 1, mRNA.	NM_005046.2	10.59	10.02	-0.57	3.99
ILMN_1666376	TRIM56	tripartite motif-containing 56 (TRIM56), mRNA.	NM_030961.1	8.87	9.68	0.8	3.98
ILMN_1732468	HSPA4L	heat shock 70kDa protein 4-like (HSPA4L), mRNA.	NM_014278.2	7.8	7.12	-0.68	3.97
ILMN_1803811	TRIB1	tribbles homolog 1 (Drosophila) (TRIB1), mRNA.	NM_025195.2	10.05	10.67	0.62	3.97
ILMN_2342579	IL7R	interleukin 7 receptor (IL7R), mRNA.	NM_002185.2	6.87	7.52	0.66	3.97
ILMN_1684497	C10orf33	chromosome 10 open reading frame 33 (C10orf33), mRNA.	NM_032709.1	7.39	6.69	-0.7	3.95
ILMN_1752455	DOCK5	dedicator of cytokinesis 5 (DOCK5), mRNA.	NM_024940.6	8.68	9.44	0.76	3.95
ILMN_1718990	NFRKB	nuclear factor related to kappaB binding protein (NFRKB), mRNA.	NM_006165.2	7.65	7.07	-0.58	3.94
ILMN_1659122	KLF10	Kruppel-like factor 10 (KLF10), transcript variant 1, mRNA.	NM_005655.1	6.68	7.4	0.72	3.92
ILMN_1662640	C20orf127	chromosome 20 open reading frame 127 (C20orf127), mRNA.	NM_080757.1	11.1	10.51	-0.59	3.91
ILMN_1811593	NPAL1	NIPA-like domain containing 1 (NPAL1), mRNA.	NM_207330.1	8.22	9	0.78	3.9
ILMN_2374115	TFAP2A	transcription factor AP-2 alpha (activating enhancer binding protein 2 alpha) (TFAP2A), transcript variant 2, mRNA.	NM_001032280.2	9.53	8.97	-0.55	3.89
ILMN_1751346	ERBB3	v-erb-b2 erythroblastic leukemia viral oncogene homolog 3 (avian) (ERBB3), transcript variant 1, mRNA.	NM_001982.2	9.38	8.41	-0.98	3.88
ILMN_1718968	MT1E	metallothionein 1E (functional) (MT1E), mRNA.	NM_175617.2	7.27	6.73	-0.55	3.88
ILMN_1703926	PTGER2	prostaglandin E receptor 2 (subtype EP2), 53kDa (PTGER2), mRNA.	NM_000956.2	8.22	8.79	0.58	3.88
ILMN_1674650	C9orf95	chromosome 9 open reading frame 95 (C9orf95), mRNA.	NM_017881.1	9.39	8.55	-0.84	3.87
ILMN_1685441	DDEFL1	development and differentiation enhancing factor-like 1 (DDEFL1), mRNA.	NM_017707.2	9.02	8.31	-0.72	3.87
ILMN_2262444	PDE7A	phosphodiesterase 7A (PDE7A), transcript variant 2, mRNA.	NM_002604.1	9.23	9.86	0.63	3.86
ILMN_1686573	DEFB1	defensin, beta 1 (DEFB1), mRNA.	NM_005218.3	7.63	6.72	-0.92	3.83
ILMN_1797009	F3	coagulation factor III (thromboplastin, tissue factor) (F3), mRNA.	NM_001993.2	8.33	9.03	0.7	3.8
ILMN_2401873	DUSP10	dual specificity phosphatase 10 (DUSP10), transcript variant 3, mRNA.	NM_144729.1	9.56	8.83	-0.73	3.79
ILMN_2352921	BPGM	2,3-bisphosphoglycerate mutase (BPGM), transcript variant 1, mRNA.	NM_001724.3	7.21	7.86	0.65	3.79
ILMN_1812968	SOX18	SRY (sex determining region Y)-box 18 (SOX18), mRNA.	NM_018419.2	6.78	7.7	0.92	3.78
ILMN_1726448	MMP1	matrix metalloproteinase 1 (interstitial collagenase) (MMP1), mRNA.	NM_002421.2	7.12	7.94	0.82	3.78
ILMN_2175112	KCN53	potassium voltage-gated channel, delayed-rectifier, subfamily 5, member 3 (KCN53), mRNA.	NM_002252.3	7.65	7.11	-0.54	3.76
ILMN_2402416	DNAJB6	DnaJ (Hsp40) homolog, subfamily B, member 6 (DNAJB6), transcript variant 2, mRNA.	NM_005494.2	10.64	11.16	0.52	3.76
ILMN_2411897	KLF10	Kruppel-like factor 10 (KLF10), transcript variant 1, mRNA.	NM_005655.1	6.39	7.02	0.62	3.76
ILMN_1671005	IRF2BP2	interferon regulatory factor 2 binding protein 2 (IRF2BP2), transcript variant 1, mRNA.	NM_182972.2	8.15	8.77	0.62	3.75
ILMN_1867664	SPTLC3	serine palmitoyltransferase, long chain base subunit 3 (SPTLC3), mRNA.	NM_018327.2	8.27	7.53	-0.75	3.74
ILMN_1893697	nj54b12.s1 NCI CGAP Pr9 cDNA clone IMAGE:996287, mRNA sequence			7.19	6.53	-0.66	3.74
ILMN_2188264	CYR61	cysteine-rich, angiogenic inducer, 61 (CYR61), mRNA.	NM_001554.3	8.32	9.62	1.3	3.73
ILMN_2077905	PTGFRN	prostaglandin F2 receptor negative regulator (PTGFRN), mRNA.	NM_020440.2	7.64	8.51	0.87	3.72
ILMN_1715189	LHX6	LIM homeobox 6 (LHX6), transcript variant 2, mRNA.	NM_199160.2	6.37	5.75	-0.61	3.71
ILMN_1751561	CAMK1D	calcium/calmodulin-dependent protein kinase 1D (CAMK1D), transcript variant 2, mRNA.	NM_153498.2	6.18	6.77	0.6	3.71
ILMN_1695719	EIF2C2	eukaryotic translation initiation factor 2C, 2 (EIF2C2), mRNA.	NM_012154.2	9.7	10.41	0.72	3.71
ILMN_1718671	GJB6	gap junction protein, beta 6 (GJB6), mRNA.	NM_006783.2	6.07	6.62	0.55	3.71
ILMN_1747556	CDK9	cyclin-dependent kinase 9 (CDC2-related kinase) (CDK9), mRNA.	NM_001261.2	9.17	9.77	0.6	3.7
ILMN_1794643	ZGPAT	zinc finger, CCCH-type with G patch domain (ZGPAT), transcript variant 1, mRNA.	NM_032527.3	10.02	10.55	0.53	3.69
ILMN_1708006	MICB	MHC class I polypeptide-related sequence B (MICB), mRNA.	NM_005931.2	8.91	8.37	-0.54	3.68
ILMN_1789793	NUAK2	NUAK family, SNF1-like kinase, 2 (NUAK2), mRNA.	NM_030952.1	6.87	7.54	0.68	3.68
ILMN_1658483	IL1A	interleukin 1, alpha (IL1A), mRNA.	NM_000575.3	7.18	7.84	0.66	3.68
ILMN_1695290	FERMT2	fermitin family homolog 2 (Drosophila) (FERMT2), mRNA.	NM_006832.1	8.83	9.38	0.56	3.65
ILMN_1685496	RG57	regulator of G-protein signalling 7 (RG57), mRNA.	NM_002924.3	8.05	8.9	0.85	3.65
ILMN_1651767	MKL1	megakaryoblastic leukemia (translocation) 1 (MKL1), mRNA.	NM_020831.3	7.39	8.13	0.74	3.65
ILMN_2151281	GABARAPL1	GABA(A) receptor-associated protein like 1 (GABARAPL1), mRNA.	NM_031412.2	9.49	10.2	0.71	3.63
ILMN_1684211	SEC14L2	SEC14-like 2 (S. cerevisiae) (SEC14L2), mRNA.	NM_012429.1	7.14	7.9	0.77	3.62
ILMN_1748844	CNKSR3	CNKSR family member 3 (CNKSR3), mRNA.	NM_173515.2	8.29	7.66	-0.63	3.58
ILMN_1660451	STARD13	START domain containing 13 (STARD13), transcript variant delta, mRNA.	NM_178008.1	8.94	9.47	0.53	3.58
ILMN_1846771	AGENCOURT_10167693 NIH_MGC_71 cDNA clone IMAGE:6527009 5, mRNA sequence			8.05	7.38	-0.67	3.57
ILMN_1727200	SLCO4A1	solute carrier organic anion transporter family, member 4A1 (SLCO4A1), mRNA.	NM_016354.3	7.38	6.72	-0.66	3.57
ILMN_1721922	NAB2	NGFI-A binding protein 2 (EGR1 binding protein 2) (NAB2), mRNA.	NM_005967.2	7.76	7.06	-0.7	3.57
ILMN_1680987	HAND1	heart and neural crest derivatives expressed 1 (HAND1), mRNA.	NM_004821.1	6.18	6.77	0.6	3.57
ILMN_1703891	TBC1D9	TBC1 domain family, member 9 (with GRAM domain) (TBC1D9), mRNA.	NM_015130.2	7.98	7.4	-0.58	3.55
ILMN_1760490	ACVR1	activin A receptor, type I (ACVR1), mRNA.	NM_001105.2	10.02	10.55	0.54	3.55
ILMN_1687721	PROC	protein C (inactivator of coagulation factors Va and VIIIa) (PROC), mRNA.	NM_000312.1	7.76	8.33	0.57	3.55
ILMN_1687538	ETS1	v-ets erythroblastosis virus E26 oncogene homolog 1 (avian) (ETS1), mRNA.	NM_005238.2	10.45	11.31	0.87	3.55
ILMN_1670539	LOC92017	similar to RIKEN cDNA 4933437K13 (LOC92017), mRNA.	NM_001009607.1	7.31	7.85	0.55	3.55
ILMN_2211728	GUCA1B	guanylate cyclase activator 1B (retina) (GUCA1B), mRNA.	NM_002098.3	7.12	6.42	-0.7	3.54
ILMN_1780255	KLK6	kallikrein-related peptidase 6 (KLK6), transcript variant b, mRNA.	NM_001012964.1	9.27	9.8	0.52	3.53
ILMN_2407389	GPNMB	glycoprotein (transmembrane) nmb (GPNMB), transcript variant 2, mRNA.	NM_002510.2	9.49	8.93	-0.57	3.51
ILMN_1910180		cDNA: FLJ21027 fls, clone CAE07110		6.65	7.33	0.68	3.51
ILMN_1741346	EPHB3	EPH receptor B3 (EPHB3), mRNA.	NM_004443.3	8.07	7.47	-0.59	3.5
ILMN_1683998	CREG2	cellular repressor of E1A-stimulated genes 2 (CREG2), mRNA.	NM_153836.2	7.09	8	0.91	3.49
ILMN_2336094	ODZ3	odt, odd Oz/ten-m homolog 3 (Drosophila) (ODZ3), mRNA.	NM_001080477.1	9.68	10.33	0.65	3.49
ILMN_1791593	MGC24039	hypothetical protein MGC24039 (MGC24039), mRNA.	NM_144973.3	6.73	6.17	-0.56	3.46
ILMN_2046470	DAAM1	dishevelled associated activator of morphogenesis 1 (DAAM1), mRNA.	NM_014992.1	10.67	11.43	0.76	3.46
ILMN_1835631		AV645572 GLC cDNA clone GLCABG03 3, mRNA sequence		7.34	8.15	0.81	3.46
ILMN_2398408	TCEAL1	transcription elongation factor A (SII)-like 1 (TCEAL1), transcript variant 2, mRNA.	NM_001006639.1	8.95	9.53	0.58	3.46
ILMN_1740415	WFDC3	WAP four-disulfide core domain 3 (WFDC3), mRNA.	NM_080614.1	7.18	6.36	-0.82	3.45
ILMN_1689876	LOC648189	PREDICTED: similar to TBC1 domain family, member 2B (LOC648189), mRNA.	XM_937239.2	6.99	7.63	0.64	3.45
ILMN_1900998		cDNA clone IMAGE:5299888		8.88	7.98	-0.9	3.43
ILMN_1754130	TRIM52	tripartite motif-containing 52 (TRIM52), mRNA.	NM_032765.2	8.12	8.78	0.66	3.43
ILMN_1813763	SLC20A2	solute carrier family 20 (phosphate transporter), member 2 (SLC20A2), mRNA.	NM_006749.3	9.24	8.57	-0.67	3.41
ILMN_1814333	SERPINI1	serpin peptidase inhibitor, clade I (neuroserpin), member 1 (SERPINI1), mRNA.	NM_005025.3	6.81	6.24	-0.57	3.41
ILMN_1717636	RGMA	RGM domain family, member A (RGMA), mRNA.	NM_020211.1	8.09	7.43	-0.65	3.41
ILMN_1708798	EAF2	ELL associated factor 2 (EAF2), mRNA.	NM_018456.4	7.73	8.41	0.68	3.41
ILMN_2124802	MT1H	metallothionein 1H (MT1H), mRNA.	NM_005951.2	7.77	6.99	-0.78	3.4
ILMN_1757237	DDEF2	development and differentiation enhancing factor 2 (DDEF2), mRNA.	NM_003887.1	9.14	9.83	0.69	3.4
ILMN_1696432	IDH1	isocitrate dehydrogenase 1 (NADP+), soluble (IDH1), mRNA.	NM_005896.2	9.9	9.16	-0.74	3.38
ILMN_1734781	IFNE1	interferon epsilon 1 (IFNE1), mRNA.	NM_176891.3	6.48	7.08	0.6	3.35
ILMN_2340027	TSPAN4	tetraspanin 4 (TSPAN4), transcript variant 6, mRNA.	NM_001025238.1	7.38	8.06	0.67	3.35
ILMN_2413318	CCDC32	coiled-coil domain containing 32 (CCDC32), transcript variant 3, mRNA.	NM_001080791.1	7.84	8.44	0.6	3.33
ILMN_1690523	LRR20	leucine rich repeat containing 20 (LRR20), transcript variant 2, mRNA.	NM_018239.2	9.47	8.89	-0.58	3.3
ILMN_1800311	HSF2	heat shock transcription factor 2 (HSF2), mRNA.	NM_004506.2	8.69	8.14	-0.55	3.3
ILMN_1673917	GTTF2	general transcription factor II, i (GTTF2), transcript variant 3, mRNA.	NM_033001.1	8.47	9.08	0.62	3.3
ILMN_1779144	CLEC2A	C-type lectin domain family 2, member A (CLEC2A), mRNA.	NM_207375.1	5.85	6.53	0.68	3.3
ILMN_1758672	FAM107B	family with sequence similarity 107, member B (FAM107B), mRNA.	NM_031453.2	9.43	10.15	0.72	3.3
ILMN_1655165	RNF138	ring finger protein 138 (RNF138), transcript variant 1, mRNA.	NM_016271.3	7.9	7.24	-0.66	3.29
ILMN_2138801	TP73L	tumor protein p73-like (TP73L), mRNA.	NM_003722.3	11.71	12.64	0.93	3.29
ILMN_2162860	SLFN11	schlafen family member 11 (SLFN11), mRNA.	NM_152270.2	7.42	6.84	-0.58	3.27
ILMN_1770641	KLHL3	kelch-like 3 (Drosophila) (KLHL3), mRNA.	NM_017415.1	6.98	6.38	-0.6	3.26
ILMN_1711048	ZBTB17	zinc finger and BTB domain containing 17 (ZBTB17), mRNA.	NM_003443.1	8.22	8.82	0.6	3.25
ILMN_1697729	MAP2K6	mitogen-activated protein kinase kinase 6 (MAP2K6), mRNA.	NM_002758.3	6.39	5.85	-0.54	3.23
ILMN_1663873	MMP13	matrix metalloproteinase 13 (collagenase 3) (MMP13), mRNA.	NM_002427.2	7.21	8.09	0.88	3.23
ILMN_1776077	SF1	splicing factor 1 (SF1), transcript variant 4, mRNA.	NM_201997.1	7.74	8.56	0.82	3.23
ILMN_2347193	GSDML	gasdermin-like (GSDML), transcript variant 2, mRNA.	NM_018530.2	8.08	7.4	-0.68	3.22
ILMN_2238928	RADS1C	RAD51 homolog C (S. cerevisiae) (RADS1C), transcript variant 1, mRNA.	NM_058216.1	10.24	9.69	-0.54	3.21
ILMN_1677693	GPR109B	G protein-coupled receptor 109B (GPR109B), mRNA.	NM_006018.1	7.18	6.58	-0.61	3.2
ILMN_1722981	TLR5	toll-like receptor 5 (TLR5), mRNA.	NM_003268.4	8.27	7.69	-0.58	3.19

**Supplement 2: TGFb Signature - significantly regulated genes upon 4h TGFb stimulation of HaCaT cells**

Illumina Identifier	HGNC gene symbol	Gene Description	Refseq ID	UT 4h	UT+TGFb 4h	LR +/- TGFb 4h	-log10 pVal LR +/- TGFb 4h
ILMN_1746158	HOXD11	homeobox D11 (HOXD11), mRNA.	NM_021192.2	7.91	8.54	0.63	3.19
ILMN_1668465	KIAA1609	KIAA1609 (KIAA1609), mRNA.	NM_020947.2	7.6	8.18	0.58	3.19
ILMN_1893679		BX098660 Soares placenta Nb2HP cDNA clone IMAGp998L03214, mRNA sequence		7.49	6.78	-0.72	3.14
ILMN_1879480		cDNA FLJ35319 fis, clone PROST2011577		7.77	7.12	-0.65	3.14
ILMN_2404917	AFAP1L2	actin filament associated protein 1-like 2 (AFAP1L2), transcript variant 2, mRNA.	NM_032550.2	10.27	10.81	0.54	3.14
ILMN_1662038	LARGE	like-glycosyltransferase (LARGE), transcript variant 1, mRNA.	NM_004737.3	7.79	8.3	0.51	3.14
ILMN_1712684	FAM20C	family with sequence similarity 20, member C (FAM20C), mRNA.	NM_020223.2	7.98	8.54	0.56	3.14
ILMN_1712628	GTF2IRD1	GTF2I repeat domain containing 1 (GTF2IRD1), transcript variant 1, mRNA.	NM_016328.1	7.84	8.43	0.58	3.14
ILMN_1733937	MMD	monocyte to macrophage differentiation-associated (MMD), mRNA.	NM_012329.2	7.16	7.78	0.63	3.14
ILMN_2381476	SPG3A	spastic paraplegia 3A (autosomal dominant) (SPG3A), transcript variant 2, mRNA.	NM_181598.2	7.94	7.42	-0.52	3.12
ILMN_2214355	RAB30	RAB30, member RAS oncogene family (RAB30), mRNA.	NM_014488.3	6.98	7.65	0.67	3.12
ILMN_2051731	DUSP5P	dual specificity phosphatase 5 pseudogene (DUSP5P) on chromosome 1.	NR_002834.1	6.92	6.3	-0.62	3.1
ILMN_1746618	PAQR7	progesterin and adiponQ receptor family member VII (PAQR7), mRNA.	NM_178422.4	9.06	8.39	-0.67	3.1
ILMN_1800332	NGB	neuroglobin (NGB), mRNA.	NM_021257.3	7.04	7.65	0.61	3.1
ILMN_1655922	SAPS2	PREDICTED: SAPS domain family, member 2, transcript variant 2 (SAPS2), mRNA.	XM_942540.1	10.33	10.83	0.5	3.1
ILMN_1786197	NR2F1	nuclear receptor subfamily 2, group F, member 1 (NR2F1), mRNA.	NM_005654.4	8.99	8.41	-0.58	3.09
ILMN_1802082	PRDM8	PR domain containing 8 (PRDM8), transcript variant 1, mRNA.	NM_020226.3	6.87	7.57	0.7	3.08
ILMN_1664283	C9orf75	chromosome 9 open reading frame 75 (C9orf75), mRNA.	NM_173691.2	8.26	7.67	-0.59	3.07
ILMN_1798210	E2F7	E2F transcription factor 7 (E2F7), mRNA.	NM_203394.2	9.57	10.19	0.62	3.07
ILMN_1657996	LOC642035	PREDICTED: hypothetical protein LOC642035 (LOC642035), mRNA.	XM_936105.1	7	7.63	0.63	3.05
ILMN_1789058	C1orf188	chromosome 1 open reading frame 188 (C1orf188), mRNA.	NM_173795.2	8.32	7.77	-0.55	3.03
ILMN_1810591	PUS10	pseudouridylate synthase 10 (PUS10), mRNA.	NM_144709.1	7.29	7.91	0.62	3
ILMN_1678799	RAPGEF1	Rap guanine nucleotide exchange factor (GEF) 1 (RAPGEF1), transcript variant 2, mRNA.	NM_198679.1	6.78	7.44	0.65	3
ILMN_2057479	EGFL6	EGF-like-domain, multiple 6 (EGFL6), mRNA.	NM_015507.2	6.81	6.21	-0.61	2.99
ILMN_1655796	39875	PREDICTED: membrane-associated ring finger (C3HC4) 3 (MARCH3), mRNA.	XM_001127871.1	8.1	8.69	0.6	2.98
ILMN_1787186	NOV	nephroblastoma overexpressed gene (NOV), mRNA.	NM_002514.2	7.18	6.58	-0.6	2.96
ILMN_1651964	ABCC5	ATP-binding cassette, sub-family C (CFTR/MRP), member 5 (ABCC5), transcript variant 2, mRNA.	NM_001023587.1	10.29	9.77	-0.52	2.96
ILMN_1689251	SPG3A	spastic paraplegia 3A (autosomal dominant) (SPG3A), transcript variant 1, mRNA.	NM_015915.3	7.62	7	-0.63	2.95
ILMN_1723418	CEL	carboxyl ester lipase (bile salt-stimulated lipase) (CEL), mRNA.	NM_001807.3	8.68	8.1	-0.58	2.95
ILMN_2294976	RNASE4	ribonuclease, RNase A family, 4 (RNASE4), transcript variant 1, mRNA.	NM_194430.1	7.49	6.86	-0.63	2.93
ILMN_1735014	KLF6	Kruppel-like factor 6 (KLF6), transcript variant 2, mRNA.	NM_001300.4	10.46	10.97	0.51	2.92
ILMN_1798602	PCF11	PCF11, cleavage and polyadenylation factor subunit, homolog (S. cerevisiae) (PCF11), mRNA.	NM_015885.2	9	8.17	-0.84	2.91
ILMN_1798855	RASSF9	Ras association (RalGDS/AF-6) domain family (N-terminal) member 9 (RASSF9), mRNA.	NM_005447.3	6.01	6.55	0.54	2.91
ILMN_1699644	39875	PREDICTED: membrane-associated ring finger (C3HC4) 3 (MARCH3), mRNA.	XM_001127871.1	8.16	8.7	0.54	2.89
ILMN_1689004	TNFRSF12A	tumor necrosis factor receptor superfamily, member 12A (TNFRSF12A), mRNA.	NM_016639.1	10.5	11.17	0.66	2.89
ILMN_2249018	LOC389816	cytokeratin associated protein (LOC389816), mRNA.	NM_001013653.1	7.98	7.42	-0.56	2.88
ILMN_1653712	UAP1L1	UDP-N-acetylglucosamine pyrophosphorylase 1-like 1 (UAP1L1), mRNA.	NM_207309.1	7.67	7.16	-0.51	2.87
ILMN_1686261	TOM1L2	target of myb1-like 2 (chicken) (TOM1L2), transcript variant 3, mRNA.	NM_001082968.1	7.38	6.83	-0.55	2.87
ILMN_2070896	BMPR2	bone morphogenetic protein receptor, type II (serine/threonine kinase) (BMPR2), mRNA.	NM_001204.5	8.98	9.66	0.68	2.86
ILMN_1792679	ITGA5	integrin, alpha 5 (fibronectin receptor, alpha polypeptide) (ITGA5), mRNA.	NM_00205.2	7.32	7.96	0.63	2.86
ILMN_1767336	AADACL1	arylacetylcholinesterase-like 1 (AADACL1), mRNA.	NM_020792.3	9.11	8.56	-0.55	2.85
ILMN_1750497	GPR109A	G protein-coupled receptor 109A (GPR109A), mRNA.	NM_177551.3	7.48	6.81	-0.67	2.85
ILMN_1674629	C9orf3	chromosome 9 open reading frame 3 (C9orf3), mRNA.	NM_032823.3	8.43	8.95	0.52	2.84
ILMN_1764619	FLJ45244	FLJ45244 protein (FLJ45244), mRNA.	NM_207443.1	7.41	6.74	-0.67	2.82
ILMN_1749044	PVRL4	poliovirus receptor-related 4 (PVRL4), mRNA.	NM_030916.1	6.92	6.27	-0.65	2.81
ILMN_1715555	DBP	D site of albumin promoter (albumin D-box) binding protein (DBP), mRNA.	NM_001352.2	7.1	6.46	-0.64	2.79
ILMN_1715401	MT1G	metallothionein 1G (MT1G), mRNA.	NM_005950.1	8.56	7.96	-0.6	2.78
ILMN_1731609	CHMP6	PREDICTED: chromatin modifying protein 6 (CHMP6), mRNA.	XM_001132548.1	7.53	8.06	0.52	2.77
ILMN_1681252	C17orf44	chromosome 17 open reading frame 44 (C17orf44), mRNA.	NM_173621.1	7.13	6.54	-0.59	2.75
ILMN_2239754	IFIT3	interferon-induced protein with tetratricopeptide repeats 3 (IFIT3), mRNA.	NM_001549.2	8	7.22	-0.78	2.74
ILMN_1697971	TRIM38	tripartite motif-containing 38 (TRIM38), mRNA.	NM_006355.2	8.55	7.92	-0.64	2.74
ILMN_1799579	CCDC51	coiled-coil domain containing 51 (CCDC51), mRNA.	NM_024661.3	8.91	8.34	-0.57	2.73
ILMN_1755954	CPEB3	cytoplasmic polyadenylation element binding protein 3 (CPEB3), mRNA.	NM_014912.3	9.04	8.36	-0.68	2.7
ILMN_2043079	ILDR1	immunoglobulin-like domain containing receptor 1 (ILDR1), mRNA.	NM_175924.2	7.26	6.7	-0.56	2.69
ILMN_2410826	OAS1	2'-5'-oligoadenylate synthetase 1, 40/46kDa (OAS1), transcript variant 3, mRNA.	NM_001032409.1	6.97	6.23	-0.73	2.68
ILMN_1745262	REM2	RAS (RAD and GEM)-like GTP binding 2 (REM2), mRNA.	NM_173527.2	7.52	6.97	-0.55	2.68
ILMN_1700144	ITGA10	integrin, alpha 10 (ITGA10), mRNA.	NM_003637.3	6.88	6.34	-0.55	2.68
ILMN_1722811	CDKN1B	cyclin-dependent kinase inhibitor 1B (p27, Kip1) (CDKN1B), mRNA.	NM_004064.2	9.56	8.77	-0.79	2.63
ILMN_1917095		DA697821 NT2NE2 cDNA clone NT2NE2019092 5, mRNA sequence		5.96	6.47	0.51	2.59
ILMN_1824391		EST384910 MAGe resequences, MAGL cDNA, mRNA sequence		8.22	8.75	0.53	2.56
ILMN_1681467	RAB11FIP4	RAB11 family interacting protein 4 (class II) (RAB11FIP4), mRNA.	NM_032932.3	7.2	6.62	-0.58	2.53
ILMN_1718629	NR1P1	nuclear receptor interacting protein 1 (NR1P1), mRNA.	NM_003489.2	9.24	9.98	0.74	2.5
ILMN_1762308	LOC654191	PREDICTED: similar to RIKEN cDNA 4933437K13 (LOC654191), mRNA.	XM_940642.1	8.63	9.14	0.51	2.47
ILMN_1700202	TMEM135	transmembrane protein 135 (TMEM135), mRNA.	NM_022918.2	8.18	7.59	-0.59	2.45
ILMN_2055156	PAG1	phosphoprotein associated with glycosphingolipid microdomains 1 (PAG1), mRNA.	NM_018440.3	6.55	7.08	0.53	2.45
ILMN_1714170	SPSB1	splA/ryanodine receptor domain and SOCS box containing 1 (SPSB1), mRNA.	NM_025106.2	7.97	7.45	-0.52	2.41
ILMN_1653026	PLAC8	placenta-specific 8 (PLAC8), mRNA.	NM_016619.1	7.85	7.31	-0.54	2.41
ILMN_2372413	BID	BH3 interacting domain death agonist (BID), transcript variant 3, mRNA.	NM_197967.1	8.23	7.69	-0.54	2.4
ILMN_1752008	OTUD1	PREDICTED: OTU domain containing 1 (OTUD1), mRNA.	XM_939698.1	7.97	8.54	0.56	2.4
ILMN_1693233	KIAA0513	KIAA0513 (KIAA0513), mRNA.	NM_014732.2	7.46	6.91	-0.55	2.39
ILMN_1719696	PLD1	phospholipase D1, phosphatidylcholine-specific (PLD1), mRNA.	NM_002662.2	7.58	7.03	-0.54	2.39
ILMN_1805466	SOX9	SRY (sex determining region Y)-box 9 (campomelic dysplasia, autosomal sex-reversal) (SOX9), mRNA.	NM_000346.2	8.91	9.64	0.72	2.37
ILMN_1761422	LOC440349	PREDICTED: similar to nuclear pore complex interacting protein, transcript variant 1 (LOC440349), mRNA.	XM_496129.2	6.97	7.7	0.73	2.37
ILMN_1838655		full-length cDNA clone CS0DI053Y009 of Placenta Cot 25-normalized of (human)		6.79	7.32	0.54	2.36
ILMN_1687556	DAPL1	death associated protein-like 1 (DAPL1), mRNA.	NM_001017920.1	6.82	6.25	-0.56	2.33
ILMN_1741159	MAP3K8	mitogen-activated protein kinase kinase kinase 8 (MAP3K8), mRNA.	NM_005204.2	8.22	7.68	-0.54	2.31
ILMN_2412380	TSC2D1	TSC22 domain family, member 1 (TSC22D1), transcript variant 1, mRNA.	NM_183422.1	9.67	10.28	0.6	2.31
ILMN_2075927	STK40	serine/threonine kinase 40 (STK40), mRNA.	NM_032017.1	9.77	10.28	0.51	2.29
ILMN_1793990	ID2	inhibitor of DNA binding 2, dominant negative helix-loop-helix protein (ID2), mRNA.	NM_002166.4	8.77	8.2	-0.57	2.28
ILMN_2133100	LPIN2	lipin 2 (LPIN2), mRNA.	NM_014646.2	7.65	8.16	0.52	2.25
ILMN_1752247	AKAP13	A kinase (PRKA) anchor protein 13 (AKAP13), transcript variant 1, mRNA.	NM_006738.4	7.71	8.24	0.53	2.22
ILMN_2075757	LRIG3	leucine-rich repeats and immunoglobulin-like domains 3 (LRIG3), mRNA.	NM_153377.3	7.66	8.27	0.61	2.22
ILMN_2388585	GOPC	golgi associated PDZ and coiled-coil motif containing (GOPC), transcript variant 1, mRNA.	NM_020399.2	8.06	8.63	0.57	2.17
ILMN_2294978	RNASE4	ribonuclease, RNase A family, 4 (RNASE4), transcript variant 1, mRNA.	NM_194430.1	7.6	7.03	-0.58	2.12
ILMN_1679838	WBP5	WW domain binding protein 5 (WBP5), transcript variant 2, mRNA.	NM_001006612.1	11.1	10.58	-0.51	2.12
ILMN_1741869	WDR47	WD repeat domain 47 (WDR47), mRNA.	NM_014969.4	9.09	8.54	-0.55	2.12
ILMN_1855278		EST366269 MAGe resequences, MAGC cDNA, mRNA sequence		8.09	8.6	0.5	2.11
ILMN_1670932	LOC645737	PREDICTED: similar to 60S ribosomal protein L7, transcript variant 1 (LOC645737), mRNA.	XM_930508.1	8.55	7.73	-0.82	2.08
ILMN_1749636	FLJ13236	hypothetical protein FLJ13236 (FLJ13236), mRNA.	NM_024902.2	5.86	6.37	0.51	2.07
ILMN_1763666	ALDH3B2	aldehyde dehydrogenase 3 family, member B2 (ALDH3B2), transcript variant 2, mRNA.	NM_001031615.1	7.52	6.96	-0.56	2.03
ILMN_1783998	STARD5	STAR-related lipid transfer (START) domain containing 5 (STARD5), mRNA.	NM_181900.2	7.12	6.49	-0.63	2.03
ILMN_1739645	ANLN	anillin, actin binding protein (ANLN), mRNA.	NM_018685.2	11.04	10.36	-0.68	2.01
ILMN_2318643	TGIF1	TGFb-induced factor homeobox 1 (TGIF1), transcript variant 1, mRNA.	NM_170695.2	8.57	9.07	0.51	2