

**Supplementary Table 2: Summary of differentially regulated gene in 4-OHT treated K13 ER-transduced HUVEC.**

S.No.	Gene Name	Gene	Entrez Gene	Fold Change
<b>Up-regulated genes</b>				
1	<i>chemokine (C-C motif) ligand 2</i>	CCL2	6347	71.4
2	<i>ubiquitin D</i>	UBD	10537	58.4
3	<i>chemokine (C-C motif) ligand 20</i>	CCL20	6364	53.1
4	<i>chemokine (C-C motif) ligand 5</i>	CCL5	6352	48.3
5	<i>chemokine (C-X-C motif) ligand 10</i>	CXCL10	3627	47.7
6	<i>vascular cell adhesion molecule 1</i>	VCAM1	7412	46.0
7	<i>selectin E (endothelial adhesion molecule 1)</i>	SELE	6401	35.4
8	<i>superoxide dismutase 2, mitochondrial</i>	SOD2	6648	35.2
9	<i>chemokine (C-X-C motif) ligand 3</i>	CXCL3	2921	33.8
10	<i>chemokine (C-X-C motif) ligand 2</i>	CXCL2	2920	32.2
11	<i>interleukin 8</i>	IL8	3576	31.5
12	<i>chromosome 15 open reading frame 48</i>	C15orf48	84419	29.6
13	<i>solute carrier family 7 (cationic amino acid transporter)</i>	SLC7A2	6542	23.2
14	<i>chemokine (C-X3-C motif) ligand 1</i>	CX3CL1	6376	22.3
15	<i>intercellular adhesion molecule 1 (CD54)</i>	ICAM1	3383	22.2
16	<i>tumor necrosis factor, alpha-induced protein 6</i>	TNFAIP6	7130	21.2
17	<i>interleukin 6 (interferon, beta 2)</i>	IL6	3569	21.1
18	<i>colony stimulating factor 2 (granulocyte-macrophage)</i>	CSF2	1437	15.1
19	<i>interferon stimulated exonuclease gene 20kDa</i>	ISG20	3669	13.6
20	<i>chemokine (C-X-C motif) ligand 5</i>	CXCL5	6374	13.0
21	<i>laminin, gamma 2</i>	LAMC2	3918	12.7
22	<i>tumor necrosis factor, alpha-induced protein 3</i>	TNFAIP3	7128	12.5
23	<i>matrix metallopeptidase 10 (stromelysin 2)</i>	MMP10	4319	11.5
24	<i>tumor necrosis factor, alpha-induced protein 2</i>	TNFAIP2	7127	11.3
25	<i>Epstein-Barr virus induced gene 3</i>	EBI3	10148	9.8
26	<i>tumor necrosis factor (ligand) superfamily, member 13b</i>	TNFSF13B	10673	9.6
27	<i>phospholipase A1 member A</i>	PLA1A	51365	9.4
28	<i>GTP cyclohydrolase 1 (dopa-responsive dystonia)</i>	GCH1	2643	9.0
29	<i>nuclear factor of kappa light polypeptide gene enhancer, alpha</i>	NFKBIA	4792	8.3
30	<i>proteasome (prosome, macropain) subunit, beta type, 9</i>	PSMB9	5698	7.9
31	<i>Chemokine (C-X-C motif) 1</i>	CXCI1	2919	7.7
32	<i>histone cluster 2, H2aa3</i>	HIST2	723790	7.5
33	<i>HLA-G histocompatibility antigen, class I, G</i>	HLA-G	3135	7.2
34	<i>hydroxysteroid (11-beta) dehydrogenase 1</i>	HSD11B1	3290	7.2
35	<i>chemokine (C-X-C motif) receptor 7</i>	CXCR7	57007	7.0
36	<i>major histocompatibility complex, class I, B</i>	HLA-B	3106	6.3
37	<i>nuclear receptor coactivator 7</i>	NCOA7	135112	6.1
38	<i>myxovirus (influenza virus) resistance 2 (mouse)</i>	MX2	4600	5.8
39	<i>radical S-adenosyl methionine domain containing 2</i>	RSAD2	91543	5.6
40	<i>TNFAIP3 interacting protein 1</i>	TNIP1	10318	5.5
41	<i>tissue factor pathway inhibitor 2</i>	TFPI2	7980	5.4
42	<i>interleukin 32</i>	IL32	9235	5.3
43	<i>nibrin</i>	NBN	4683	5.2
44	<i>receptor (chemosensory) transporter protein 4</i>	RTP4	64108	5.2
45	<i>baculoviral IAP repeat-containing 3</i>	BIRC3	330	5.1
46	<i>interleukin 7 receptor // interleukin 7 receptor</i>	IL7R	3575	5.0
47	<i>transporter 1, ATP-binding cassette, sub-family B (MDR/TAP)</i>	TAP1	6890	5.0
48	<i>papilin, proteoglycan-like sulfated glycoprotein</i>	PAPLN	89932	4.9
49	<i>Major histocompatibility complex, class I, F</i>	HLA-F	3134	4.9
50	<i>myosin, light chain kinase</i>	MYLK	4638	4.9
51	<i>interferon induced transmembrane protein 1 (9-27)</i>	IFITM1	8519	4.8
52	<i>interferon-induced protein 35</i>	IFI35	3430	4.8
53	<i>proline-serine-threonine phosphatase interacting protein 2</i>	PSTPIP2	9050	4.8
54	<i>bone marrow stromal cell antigen 2</i>	BST2	684	4.7
55	<i>2'-5'-oligoadenylate synthetase 3, 100kDa</i>	OAS3	4940	4.7
56	<i>caspase 1, apoptosis-related cysteine peptidase (interleukin 1, beta, convertase)</i>	CASP1	834	4.6
57	<i>interferon-induced protein with tetratricopeptide repeats 3</i>	IFIT3	3437	4.5
58	<i>CNKSR family member 3</i>	CNKSR3	154043	4.5
59	<i>likely ortholog of mouse lung-inducible Neutralized-related C3HC4 RING domain</i>	LINCR	93082	4.5
60	<i>Duffy blood group, chemokine receptor</i>	DARC	2532	4.4
61	<i>butyrophilin, subfamily 3, member A1</i>	BTN3A1	11119	4.3
62	<i>solute carrier family 2 (facilitated glucose transporter), member 6</i>	SLC2A6	11182	4.3
63	<i>lipase, endothelial</i>	LIPG	9388	4.3

64	guanylate binding protein 1, interferon-inducible, 67kDa	GBP1	2633	4.2
65	prolactin receptor	PRLR	5618	4.1
66	cytochrome b5 type A (microsomal)	CYB5A	1528	4.1
67	CD69 molecule	CD69	969	4.1
68	colony stimulating factor 3 (granulocyte)	CSF3	1440	3.9
69	C-type lectin domain family 4, member E	CLEC4E	26253	3.8
70	laminin, beta 3	LAMB3	3914	3.8
71	kynureninase (L-kynurenone hydrolase)	KYNU	8942	3.7
72	RAD50 homolog (S. cerevisiae)	RAD50	10111	3.6
73	cathepsin H	CTSH	1512	3.5
74	G protein-coupled receptor, family C, group 5, member B	GPRC5B	51704	3.5
75	inhibin, beta A (activin A, activin AB alpha polypeptide)	INHBA	3624	3.5
76	cathepsin S	CTSS	1520	3.5
77	colony stimulating factor 1 (macrophage)	CSF1	1435	3.5
78	cathepsin K	CTSK	1513	3.5
79	chromosome 11 open reading frame 17	C11orf17	56672	3.4
80	purinergic receptor P2X, ligand-gated ion channel, 4	P2RX4	5025	3.3
81	indoleamine-pyrrole 2,3 dioxygenase	INDO	3620	3.3
82	family with sequence similarity 129, member A	FAM129A	116496	3.3
83	interleukin 18 receptor 1	IL18R1	8809	3.3
84	phospholipase A2, group IVA (cytosolic, calcium-dependent)	PLA2G4A	5321	3.3
85	Wilms tumor 1 associated protein	WTAP	9589	3.3
86	glutamine-fructose-6-phosphate transaminase 2	GFPT2	9945	3.2
87	complement component 1, r subcomponent	C1R	715	3.2
88	BCL2-related protein A1	BCL2A1	597	3.2
89	hyaluronan and proteoglycan link protein 3	HAPLN3	145864	3.2
90	TAP binding protein (tapasin)	TAPBP	6892	3.2
91	interleukin-1 receptor-associated kinase 2	IRAK2	3656	3.2
92	complement factor B	CFB	629	3.1
93	lysosomal-associated membrane protein 3	LAMP3	27074	3.1
94	C1q and tumor necrosis factor related protein 1	C1QTNF1	114897	3.0
95	solute carrier family 25, member 37	SLC25A37	51312	3.0
96	Prostaglandin-endoperoxide synthase 2	PTGS2	5743	3.0
97	retinoic acid receptor responder (tazarotene induced) 1	RARRES1	5918	3.0
98	NK3 transcription factor related, locus 1 (Drosophila)	NKX3-1	4824	2.9
99	lymphocyte antigen 6 complex, locus E	LY6E	4061	2.9
100	phospholipase A2, group IVC (cytosolic, calcium-independent)	PLA2G4C	8605	2.8
101	lipopolysaccharide-induced TNF factor	LITAF	9516	2.7
102	serpin peptidase inhibitor, clade B (ovalbumin), member 2	SERPINB2	5055	2.7
103	TNF receptor-associated factor 1	TRAF1	7185	2.7
104	butyrophilin, subfamily 3, member A3	BTN3A3	10384	2.7
105	XIAP associated factor-1	BIRC4BP	54739	2.7
106	transmembrane protein induced by tumor necrosis factor alpha	TMPIT	83862	2.7
107	complement component 1, s subcomponent	C1S	716	2.6
108	toll-like receptor 3	TLR3	7098	2.5
109	zinc finger CCCH-type containing 12C	ZC3H12C	85463	2.5
110	tumor necrosis factor receptor superfamily, member 9	TNFRSF9	3604	2.5
111	solute carrier family 15, member 3	SLC15A3	51296	2.5
112	interleukin 15	IL15	3600	2.4
113	receptor-interacting serine-threonine kinase 2	RIPK2	8767	2.4
114	lectin, galactoside-binding, soluble, 3 binding protein	LGALS3BP	3959	2.4
115	CD38 molecule	CD38	952	2.3
116	interleukin 1, alpha	IL1A	3552	2.3
117	lymphotoxin beta (TNF superfamily, member 3)	LTB	4050	2.3
118	C-type lectin domain family 1, member A	CLEC1A	51267	2.2
119	likely ortholog of mouse D11lgp2	LGP2	79132	2.2
120	ADP-ribosyltransferase 4 (Dombrock blood group)	ART4	420	2.2
121	coagulation factor II (thrombin) receptor-like 1	F2RL1	2150	2.2
122	guanylate binding protein 4	GBP4	115361	2.1
123	sema domain, immunoglobulin domain (Ig), short basic domain, secreted, 3C	SEMA3C	10512	2.0

#### Down-regulated genes

124	extracellular link domain containing 1	XLKD1	10894	11.1
125	chemokine (C-C motif) ligand 14	CCL14	6358	11.0
126	ADAM metallopeptidase with thrombospondin type 1 motif, 18	ADAMTS18	170692	7.8
127	LIM domain binding 2	LDB2	9079	6.7
128	keratin 18	KRT18	3875	5.3
129	dual specificity phosphatase 4	DUSP4	1846	5.3
130	ribonuclease, RNase A family, 1 (pancreatic)	RNASE1	6035	4.7

131	<i>periostin, osteoblast specific factor</i>	<b>POSTN</b>	10631	4.7
132	<i>insulin-like growth factor binding protein 5</i>	<b>IGFBP5</b>	3488	4.6
133	<i>regulator of G-protein signalling 5</i>	<b>RGS5</b>	8490	4.6
134	<i>uroplakin 1B (regulator of G-protein signalling 5)</i>	<b>UPK1B</b>	7348	4.5
135	<i>regulator of G-protein signalling 4</i>	<b>RGS4</b>	5999	4.4
136	<i>keratin 7</i>	<b>KRT7</b>	3855	4.2
137	<i>apelin, AGTRL1 ligand</i>	<b>APLN</b>	8862	4.0
138	<i>furry homolog (<i>Drosophila</i>)</i>	<b>FRY</b>	10129	3.9
139	<i>prickle homolog 1 (<i>Drosophila</i>)</i>	<b>PRICKLE1</b>	144165	3.8
140	<i>palmDELPHIN</i>	<b>PALMD</b>	54873	3.8
141	<i>netrin 4</i>	<b>NTN4</b>	59277	3.7
142	<i>endomucin</i>	<b>EMCN</b>	51705	3.5
143	<i>BMX non-receptor tyrosine kinase</i>	<b>BMX</b>	660	3.4
144	<i>LIM homeobox 6</i>	<b>LHX6</b>	26468	3.3
145	<i>response gene to complement 32</i>	<b>RGC32</b>	28984	3.3
146	<i>latent transforming growth factor beta binding protein 2</i>	<b>LTBP2</b>	4053	3.2
147	<i>C-X-C chemokine receptor type 4</i>	<b>CXCR4</b>	7852	3.1
148	<i>hypothetical protein</i>	<b>DKFZP686</b>	22998	2.9
149	<i>aldehyde dehydrogenase 1 family, member A1</i>	<b>ALDH1A1</b>	216	2.9
150	<i>thioredoxin reductase 2</i>	<b>TXNRD2</b>	10587	2.8
151	<i>G protein-coupled receptor 116</i>	<b>GPR116</b>	221395	2.8
152	<i>carboxymethylenebutenolidase homolog (<i>Pseudomonas</i>)</i>	<b>CMBL</b>	134147	2.7
153	<i>importin 11</i>	<b>IPO11</b>	51194	2.7
154	<i>contactin associated protein-like 3</i>	<b>CNTNAP3</b>	389734	2.6
155	<i>coxsackievirus and adenovirus receptor</i>	<b>CXADR</b>	1525	2.6
156	<i>anthrax toxin receptor 1</i>	<b>ANTXR1</b>	84168	2.6
157	<i>integrin, alpha 10</i>	<b>ITGA10</b>	8515	2.5
158	<i>dysferlin, limb girdle muscular dystrophy 2B (autosomal recessive)</i>	<b>DYSF</b>	8291	2.5
159	<i>chromosome 10 open reading frame 116</i>	<b>C10orf116</b>	10974	2.5
160	<i>neuronal growth regulator 1</i>	<b>NEGR1</b>	257194	2.4
161	<i>T cell receptor beta variable 21-1</i>	<b>TRBV21-1</b>	28566	2.4
162	<i>homeodomain-only protein</i>	<b>HOP</b>	84525	2.4
163	<i>CD59 molecule, complement regulatory protein</i>	<b>CD59</b>	966	2.4
164	<i>sema domain, transmembrane domain (TM), and cytoplasmic domain, 6A</i>	<b>SEMA6A</b>	57556	2.3
165	<i>integrin, beta 4</i>	<b>ITGB4</b>	3691	2.3
166	<i>glutathione peroxidase 3 (plasma)</i>	<b>GPX3</b>	2878	2.3
167	<i>mal, T-cell differentiation protein-like</i>	<b>MALL</b>	7851	2.2
168	<i>cytochrome P450, family 1, subfamily A, polypeptide 1</i>	<b>CYP1A1</b>	1543	2.2
169	<i>thrombomodulin</i>	<b>THBD</b>	7056	2.2
170	<i>interleukin 33</i>	<b>IL33</b>	90865	2.2
171	<i>DIRAS family, GTP-binding RAS-like 3</i>	<b>DIRAS3</b>	9077	2.1
172	<i>protein phosphatase 1, regulatory (inhibitor) subunit 16B</i>	<b>PPP1R16B</b>	26051	2.1
173	<i>chromosome 20 open reading frame 160</i>	<b>C20orf160</b>	140706	2.0
174	<i>pyruvate dehydrogenase kinase, isozyme 4</i>	<b>PDK4</b>	5166	2.0