

**Supplemental Table 3: HIF1 $\alpha$  Transcription Network T47D cells**

Probe Set ID	Entrez Gene	Gene Symbol	Gene Title	Fold change [TESTOBSA] vs [ctr]
201565_s_at	3398	ID2	inhibitor of DNA binding 2, dominant negative helix-loop-helix protein	-3.494648
201566_x_at	3398	ID2	inhibitor of DNA binding 2, dominant negative helix-loop-helix protein	-3.1406143
213931_at	3398 /// 84099	ID2 /// ID2B	inhibitor of DNA binding 2, dominant negative helix-loop-helix protein /// inhibitor of DNA binding 2B, dominant negative helix-loop-helix protein (pseudogene)	-2.108427
205659_at	9734	HDAC9	histone deacetylase 9	-1.7622132
209357_at	10370	CITED2	Cbp/p300-interacting transactivator, with Glu/Asp-rich carboxy-terminal domain, 2	-1.5484288
240686_x_at	7037	TFRC	Transferrin receptor (p90, CD71)	-1.3732147
227287_at	10370	CITED2	Cbp/p300-interacting transactivator, with Glu/Asp-rich carboxy-terminal domain, 2	-1.3662235
214063_s_at	7018	TF	transferrin	-1.3574413
210339_s_at	3817	KLK2	kallikrein-related peptidase 2	-1.3396232
229696_at	2235	FECH	ferrochelataase (protoporphyrin)	-1.3353684
209855_s_at	3817	KLK2	kallikrein-related peptidase 2	-1.3153344
209993_at	5243	ABCB1	ATP-binding cassette, sub-family B (MDR/TAP), member 1	-1.3139685
216889_s_at	3172	HNF4A	hepatocyte nuclear factor 4, alpha	-1.3042924
225572_at	1385	CREB1	cAMP responsive element binding protein 1	-1.2900627
204363_at	2152	F3	coagulation factor III (thromboplastin, tissue factor)	-1.282241
1553994_at	4907	NT5E	5'-nucleotidase, ecto (CD73)	-1.2564079
205302_at	3484	IGFBP1	insulin-like growth factor binding protein 1	-1.248457
1562772_a_at	199699	DAND5	DAN domain family, member 5	-1.2480234
1552760_at	9734	HDAC9	histone deacetylase 9	-1.2195429
227486_at	4907	NT5E	5'-nucleotidase, ecto (CD73)	-1.2169946
207092_at	3952	LEP	leptin	-1.2151341
201808_s_at	2022	ENG	endoglin	-1.2010849
209854_s_at	3817	KLK2	kallikrein-related peptidase 2	-1.1919341
204614_at	5055	SERPINB2	serpin peptidase inhibitor, clade B (ovalbumin), member 2	-1.1868457
237289_at	1385	CREB1	cAMP responsive element binding protein 1	-1.1859214

214851_at	3172	HNF4A	hepatocyte nuclear factor 4, alpha	-1.1857752
214064_at	7018	TF	transferrin	-1.1743478
209201_x_at	7852	CXCR4	chemokine (C-X-C motif) receptor 4	-1.1623725
220699_s_at	3796	KIF2A	kinesin heavy chain member 2A	-1.1530087
207257_at	2056	EPO	erythropoietin	-1.1523873
1555545_at	3817	KLK2	kallikrein-related peptidase 2	-1.1520905
218780_at	29911	HOOK2	hook homolog 2 (Drosophila)	-1.1483543
216236_s_at	144195 /// 6515	SLC2A14 /// SLC2A3	solute carrier family 2 (facilitated glucose transporter), member 14 /// solute carrier family 2 (facilitated glucose transporter), member 3	-1.1464573
201849_at	664	BNIP3	BCL2/adenovirus E1B 19kDa interacting protein 3	-1.1416852
231289_at	8648	NCOA1	Nuclear receptor coactivator 1	-1.140602
219232_s_at	112399	EGLN3	egl nine homolog 3 (C. elegans)	-1.1298956
1557767_at	339345	NANOS2	nanos homolog 2 (Drosophila)	-1.1275516
207980_s_at	10370	CITED2	Cbp/p300-interacting transactivator, with Glu/Asp-rich carboxy-terminal domain, 2	-1.121847
211919_s_at	7852	CXCR4	chemokine (C-X-C motif) receptor 4	-1.1191201
227253_at	1356	CP	ceruloplasmin (ferroxidase)	-1.1169267
207954_at	2624	GATA2	GATA binding protein 2	-1.1134421
214627_at	8288	EPX	eosinophil peroxidase	-1.1092505
218995_s_at	1906	EDN1	endothelin 1	-1.1078447
222802_at	1906	EDN1	endothelin 1	-1.1063744
1555271_a_at	7015	TERT	telomerase reverse transcriptase	-1.103513
230914_at	3172	HNF4A	hepatocyte nuclear factor 4, alpha	-1.1001208
215605_at	10499	NCOA2	Nuclear receptor coactivator 2	-1.0969359
222847_s_at	112399	EGLN3	egl nine homolog 3 (C. elegans)	-1.0962088
223185_s_at	79365	BHLHE41	basic helix-loop-helix family, member e41	-1.0951428
215895_x_at	123	ADFP	Adipose differentiation-related protein	-1.0905755
202499_s_at	6515	SLC2A3	solute carrier family 2 (facilitated glucose transporter), member 3	-1.090524
203087_s_at	3796	KIF2A	kinesin heavy chain member 2A	-1.0882703
209710_at	2624	GATA2	GATA binding protein 2	-1.0865287
217028_at	7852	CXCR4	chemokine (C-X-C motif) receptor 4	-1.0840257
208691_at	7037	TFRC	transferrin receptor (p90, CD71)	-1.0810788
223045_at	54583	EGLN1	egl nine homolog 1 (C. elegans)	-1.0809251
210037_s_at	4843	NOS2	nitric oxide synthase 2, inducible	-1.0804086

221497_x_at	54583	EGLN1	egl nine homolog 1 (C. elegans)	-1.0781691
1552758_at	9734	HDAC9	histone deacetylase 9	-1.0753318
221530_s_at	79365	BHLHE41	basic helix-loop-helix family, member e41	-1.0730112
205199_at	768	CA9	carbonic anhydrase IX	-1.0660888
223046_at	54583	EGLN1	egl nine homolog 1 (C. elegans)	-1.0584486
200798_x_at	4170	MCL1	myeloid cell leukemia sequence 1 (BCL2-related)	-1.0556494
200063_s_at	4869	NPM1	nucleophosmin (nucleolar phosphoprotein B23, numatrin)	-1.052182
208429_x_at	3172	HNF4A	hepatocyte nuclear factor 4, alpha	-1.0472476
220109_at	7018	TF	transferrin	-1.0468187
202497_x_at	6515	SLC2A3	solute carrier family 2 (facilitated glucose transporter), member 3	-1.0393608
211167_s_at	2645	GCK	glucokinase (hexokinase 4)	-1.0314964
214447_at	2113	ETS1	v-ets erythroblastosis virus E26 oncogene homolog 1 (avian)	-1.0305674
212960_at	23158	TBC1D9	TBC1 domain family, member 9 (with GRAM domain)	-1.0294185
208257_x_at	5669	PSG1	pregnancy specific beta-1-glycoprotein 1	-1.0293937
224760_at	6667	SP1	Sp1 transcription factor	-1.027211
227068_at	5230	PGK1	phosphoglycerate kinase 1	-1.0267615
203086_at	3796	KIF2A	kinesin heavy chain member 2A	-1.025402
220781_at	50514	1-Dec	deleted in esophageal cancer 1	-1.0191693
210196_s_at	5669	PSG1	pregnancy specific beta-1-glycoprotein 1	-1.0178912
207248_at	3739	KCNA4	potassium voltage-gated channel, shaker-related subfamily, member 4	-1.0135952
203400_s_at	7018	TF	transferrin	-1.0125097
231242_at	79365	BHLHE41	basic helix-loop-helix family, member e41	-1.011511
1564630_at	1906	EDN1	endothelin 1	-1.0096291
211065_x_at	5211	PFKL	phosphofructokinase, liver	-1.0072786
200989_at	3091	HIF1A	hypoxia inducible factor 1, alpha subunit (basic helix-loop-helix transcription factor)	-1.0047402
240258_at	2023	ENO1	enolase 1, (alpha)	-1.0030315
221923_s_at	4869	NPM1	nucleophosmin (nucleolar phosphoprotein B23, numatrin)	1.0064886
210195_s_at	5669	PSG1	pregnancy specific beta-1-glycoprotein 1	1.0065022
237989_at	3484	IGFBP1	Insulin-like growth factor binding protein 1	1.0085517
224833_at	2113	ETS1	v-ets erythroblastosis virus E26 oncogene homolog 1 (avian)	1.0094179
203116_s_at	2235	FECH	ferrochelataase (protoporphyrin)	1.0105138
217937_s_at	51564	HDAC7	histone deacetylase 7	1.0113428
200738_s_at	5230	PGK1	phosphoglycerate kinase 1	1.0162836

204314_s_at	1385	CREB1	cAMP responsive element binding protein 1	1.0233904
1558034_s_at	1356	CP	ceruloplasmin (ferroxidase)	1.0262899
231243_s_at	79365	BHLHE41	basic helix-loop-helix family, member e41	1.0264996
204623_at	7033	TFF3	trefoil factor 3 (intestinal)	1.0289187
234393_at	9734	HDAC9	histone deacetylase 9	1.0296928
200650_s_at	3939	LDHA	lactate dehydrogenase A	1.0350311
203115_at	2235	FECH	ferrochelatase (protoporphyrin)	1.0350366
201945_at	5045	FURIN	furin (paired basic amino acid cleaving enzyme)	1.0365676
202628_s_at	5054	SERPINE1	serpin peptidase inhibitor, clade E (nexin, plasminogen activator inhibitor type 1), member 1	1.0406842
203939_at	4907	NT5E	5'-nucleotidase, ecto (CD73)	1.0412441
205732_s_at	10499	NCOA2	nuclear receptor coactivator 2	1.0413772
216699_s_at	3816	KLK1	kallikrein 1	1.0421392
203665_at	3162	HMOX1	heme oxygenase (decycling) 1	1.0437062
201249_at	6513	SLC2A1	solute carrier family 2 (facilitated glucose transporter), member 1	1.0468999
209735_at	9429	ABCG2	ATP-binding cassette, sub-family G (WHITE), member 2	1.0484571
201809_s_at	2022	ENG	endoglin	1.0536443
200697_at	3098	HK1	hexokinase 1	1.062044
200797_s_at	4170	MCL1	myeloid cell leukemia sequence 1 (BCL2-related)	1.0658728
224314_s_at	54583	EGLN1	egl nine homolog 1 (C. elegans)	1.0662946
204313_s_at	1385	CREB1	cAMP responsive element binding protein 1	1.068598
209122_at	123	ADFP	adipose differentiation-related protein	1.0808451
201169_s_at	8553	BHLHE40	basic helix-loop-helix family, member e40	1.0837573
209106_at	8648	NCOA1	nuclear receptor coactivator 1	1.0845438
214057_at	4170	MCL1	Myeloid cell leukemia sequence 1 (BCL2-related)	1.0850769
204846_at	1356	CP	ceruloplasmin (ferroxidase)	1.1007975
1568765_at	5054	SERPINE1	serpin peptidase inhibitor, clade E (nexin, plasminogen activator inhibitor type 1), member 1	1.1012657
243951_at	5243	ABCB1	ATP-binding cassette, sub-family B (MDR/TAP), member 1	1.1022251
201968_s_at	5236	PGM1	phosphoglucomutase 1	1.1035419
236326_at	51564	HDAC7	histone deacetylase 7	1.1075935
237214_at	7037	TFRC	transferrin receptor (p90, CD71)	1.1120296
221691_x_at	4869	NPM1	nucleophosmin (nucleolar phosphoprotein B23, numatrin)	1.1123724
200632_s_at	10397	NDRG1	N-myc downstream regulated 1	1.1180332
214832_at	3172	HNF4A	hepatocyte nuclear factor 4, alpha	1.1214911

217254_s_at	2056	EPO	erythropoietin	1.123006
1553685_s_at	6667	SP1	Sp1 transcription factor	1.13211
224754_at	6667	SP1	Sp1 transcription factor	1.1358296
200966_x_at	226	ALDOA	aldolase A, fructose-bisphosphate	1.1371278
207199_at	7015	TERT	telomerase reverse transcriptase	1.1453434
228143_at	1356	CP	ceruloplasmin (ferroxidase)	1.1616286
200737_at	5230	PGK1	phosphoglycerate kinase 1	1.1633034
222088_s_at	144195 /// 6515	SLC2A14 /// SLC2A3	solute carrier family 2 (facilitated glucose transporter), member 14 /// solute carrier family 2 (facilitated glucose transporter), member 3	1.1638811
206762_at	3741	KCNA5	potassium voltage-gated channel, shaker-related subfamily, member 5	1.1683596
1555355_a_at	2113	ETS1	v-ets erythroblastosis virus E26 oncogene homolog 1 (avian)	1.1701068
222305_at	3099	HK2	hexokinase 2	1.1713105
201231_s_at	2023	ENO1	enolase 1, (alpha)	1.1717287
225792_at	51361	HOOK1	hook homolog 1 (Drosophila)	1.1806787
214687_x_at	226	ALDOA	aldolase A, fructose-bisphosphate	1.1819047
209994_s_at	5243 /// 5244	ABCB1 /// ABCB4	ATP-binding cassette, sub-family B (MDR/TAP), member 1 /// ATP-binding cassette, sub-family B (MDR/TAP), member 4	1.195921
214513_s_at	1385	CREB1	cAMP responsive element binding protein 1	1.2010753
201102_s_at	5211	PFKL	phosphofructokinase, liver	1.2024894
201170_s_at	8553	BHLHE40	basic helix-loop-helix family, member e40	1.2103281
204312_x_at	1385	CREB1	cAMP responsive element binding protein 1	1.2107135
202627_s_at	5054	SERPINE1	serpin peptidase inhibitor, clade E (nexin, plasminogen activator inhibitor type 1), member 1	1.2130879
200796_s_at	4170	MCL1	myeloid cell leukemia sequence 1 (BCL2-related)	1.2147642
209105_at	8648	NCOA1	nuclear receptor coactivator 1	1.2187158
202498_s_at	6515	SLC2A3	solute carrier family 2 (facilitated glucose transporter), member 3	1.2282293
217294_s_at	2023	ENO1	enolase 1, (alpha)	1.2282386
238996_x_at	226	ALDOA	aldolase A, fructose-bisphosphate	1.2322649
217383_at	5230	PGK1	Phosphoglycerate kinase 1	1.2354189
201250_s_at	6513	SLC2A1	solute carrier family 2 (facilitated glucose transporter), member 1	1.2386923
1553995_a_at	4907	NT5E	5'-nucleotidase, ecto (CD73)	1.2567836
210249_s_at	8648	NCOA1	nuclear receptor coactivator 1	1.2655433
212956_at	23158	TBC1D9	TBC1 domain family, member 9 (with GRAM domain)	1.2659793

225565_at	1385	CREB1	cAMP responsive element binding protein 1	1.266063
209107_x_at	8648	NCOA1	nuclear receptor coactivator 1	1.272025
207332_s_at	7037	TFRC	transferrin receptor (p90, CD71)	1.2903928
201666_at	7076	TIMP1	TIMP metalloproteinase inhibitor 1	1.2945762
201848_s_at	664	BNIP3	BCL2/adenovirus E1B 19kDa interacting protein 3	1.2957735
210358_x_at	2624	GATA2	GATA binding protein 2	1.3303274
237215_s_at	7037	TFRC	transferrin receptor (p90, CD71)	1.3456376
205731_s_at	10499	NCOA2	nuclear receptor coactivator 2	1.366479
217356_s_at	5230	PGK1	phosphoglycerate kinase 1	1.3992506
219976_at	51361	HOOK1	hook homolog 1 (Drosophila)	1.4013871
204936_at	5871	MAP4K2	mitogen-activated protein kinase kinase kinase kinase 2	1.4171062
214732_at	6667	SP1	Sp1 transcription factor	1.4419993
202934_at	3099	HK2	hexokinase 2	1.4473424
214056_at	4170	MCL1	Myeloid cell leukemia sequence 1 (BCL2-related)	1.5460784
207163_s_at	207	AKT1	v-akt murine thymoma viral oncogene homolog 1	1.5837299
201251_at	5315	PKM2	pyruvate kinase, muscle	1.6623838
202912_at	133	ADM	adrenomedullin	1.7207075
202464_s_at	5209	PFKFB3	6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 3	2.0838382
209687_at	6387	CXCL12	chemokine (C-X-C motif) ligand 12 (stromal cell-derived factor 1)	3.5812628
203666_at	6387	CXCL12	chemokine (C-X-C motif) ligand 12 (stromal cell-derived factor 1)	7.6760893