

Table S1. List of DEGs retrieved from NCBI public database, considered for PPI network construction and analysis

GeneID	Symbol	Description	map_location	Chromosome	OMIM
7157	TP53	tumor protein p53	17p13.1	17	191170
596	BCL2	BCL2 apoptosis regulator	18q21.33	18	151430
1029	CDKN2A	cyclin dependent kinase inhibitor 2A	9p21.3	9	600160
3569	IL6	interleukin 6	7p15.3	7	147620
3383	ICAM1	intercellular adhesion molecule 1	19p13.2	19	147840
4851	NOTCH1	notch receptor 1	9q34.3	9	190198
7422	VEGFA	vascular endothelial growth factor A	6p21.1	6	192240
207	AKT1	AKT serine/threonine kinase 1	14q32.33	14	164730
7040	TGFB1	transforming growth factor beta 1	19q13.2	19	190180
5879	RAC1	Rac family small GTPase 1	7p22.1	7	602048
595	CCND1	cyclin D1	11q13.3	11	168461
25	ABL1	ABL proto-oncogene 1, non-receptor tyrosine kinase	9q34.12	9	189980
2064	ERBB2	erb-b2 receptor tyrosine kinase 2	17q12	17	164870
406991	MIR21	microRNA 21	17q23.1	17	611020
999	CDH1	cadherin 1	16q22.1	16	192090
3688	ITGB1	integrin subunit beta 1	10p11.22	10	135630
6387	CXCL12	C-X-C motif chemokine ligand 12	10q11.21	10	600835
1026	CDKN1A	cyclin dependent kinase inhibitor 1A	6p21.2	6	116899
6774	STAT3	signal transducer and activator of transcription 3	17q21.2	17	102582
958	CD40	CD40 molecule	20q13.12	20	109535
23411	SIRT1	sirtuin 1	10q21.3	10	604479
7015	TERT	telomerase reverse transcriptase	5p15.33	5	187270
4846	NOS3	nitric oxide synthase 3	7q36.1	7	163729
581	BAX	BCL2 associated X, apoptosis regulator	19q13.33	19	600040
387	RHOA	ras homolog family member A	3p21.31	3	165390
5728	PTEN	phosphatase and tensin homolog	10q23.31	10	601728
3479	IGF1	insulin like growth factor 1	12q23.2	12	147440
472	ATM	ATM serine/threonine kinase	11q22.3	11	607585
2475	MTOR	mechanistic target of rapamycin kinase	1p36.22	1	601231
1017	CDK2	cyclin dependent kinase 2	12q13.2	12	116953
5594	MAPK1	mitogen-activated protein kinase 1	22q11.22	22	176948
5468	PPARG	peroxisome proliferator activated receptor gamma	3p25.2	3	601487
10135	NAMPT	nicotinamide phosphoribosyltransferase	7q22.3	7	608764
672	BRCA1	BRCA1 DNA repair associated	17q21.31	17	113705
3091	HIF1A	hypoxia inducible factor 1 subunit alpha	14q23.2	14	603348
4170	MCL1	MCL1 apoptosis regulator, BCL2 family member	1q21.2	1	159552
4790	NFKB1	nuclear factor kappa B subunit 1	4q24	4	164011
3303	HSPA1A	heat shock protein family A (Hsp70) member 1A	6p21.33	6	140550
1647	GADD45A	growth arrest and DNA damage inducible alpha	1p31.3	1	126335
836	CASP3	caspase 3	4q35.1	4	600636
1432	MAPK14	mitogen-activated protein kinase 14	6p21.31	6	600289
5743	PTGS2	prostaglandin-endoperoxide synthase 2	1q31.1	1	600262
7099	TLR4	toll like receptor 4	9q33.1	9	603030
4780	NFE2L2	nuclear factor, erythroid 2 like 2	2q31.2	2	600492
5591	PRKDC	protein kinase, DNA-activated, catalytic subunit	8q11.21	8	600899
7097	TLR2	toll like receptor 2	4q31.3	4	603028
5970	RELA	RELA proto-oncogene, NF-kB subunit	11q13.1	11	164014

675	BRCA2	BRCA2 DNA repair associated	13q13.1	13	600185
841	CASP8	caspase 8	2q33.1	2	601763
142	PARP1	poly(ADP-ribose) polymerase 1	1q42.12	1	173870
7490	WT1	WT1 transcription factor	11p13	11	607102
3845	KRAS	KRAS proto-oncogene, GTPase	12p12.1	12	190070
6648	SOD2	superoxide dismutase 2	6q25.3	6	147460
5581	PRKCE	protein kinase C epsilon	2p21	2	176975
8743	TNFSF10	TNF superfamily member 10	3q26.31	3	603598
4968	OGG1	8-oxoguanine DNA glycosylase	3p25.3	3	601982
5595	MAPK3	mitogen-activated protein kinase 3	16p11.2	16	601795
3480	IGF1R	insulin like growth factor 1 receptor	15q26.3	15	147370
598	BCL2L1	BCL2 like 1	20q11.21	20	600039
5888	RAD51	RAD51 recombinase	15q15.1	15	179617
3315	HSPB1	heat shock protein family B (small) member 1	7q11.23	7	602195
7291	TWIST1	twist family bHLH transcription factor 1	7p21.1	7	601622
3320	HSP90AA1	heat shock protein 90 alpha family class A member 1	14q32.31	14	140571
5290	PIK3CA	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit alpha	3q26.32	3	171834
2932	GSK3B	glycogen synthase kinase 3 beta	3q13.33	3	605004
4292	MLH1	mutL homolog 1	3p22.2	3	120436
2067	ERCC1	ERCC excision repair 1, endonuclease non-catalytic subunit	19q13.32	19	126380
6667	SP1	Sp1 transcription factor	12q13.13	12	189906
5894	RAF1	Raf-1 proto-oncogene, serine/threonine kinase	3p25.2	3	164760
5599	MAPK8	mitogen-activated protein kinase 8	10q11.22	10	601158
894	CCND2	cyclin D2	12p13.32	12	123833
7517	XRCC3	X-ray repair cross complementing 3	14q32.33	14	600675
898	CCNE1	cyclin E1	19q12	19	123837
5300	PIN1	peptidylprolyl cis/trans isomerase, NIMA-interacting 1	19p13.2	19	601052
4792	NFKBIA	NFKB inhibitor alpha	14q13.2	14	164008
1E+08	HOTAIR	HOX transcript antisense RNA	12q13.13	12	611400
5579	PRKCB	protein kinase C beta	16p12.2-p12.1	16	176970
54567	DLL4	delta like canonical Notch ligand 4	15q15.1	15	605185
3190	HNRNPK	heterogeneous nuclear ribonucleoprotein K	9q21.32	9	600712
406932	MIR140	microRNA 140	16q22.1	16	611894
5209	PFKFB3	6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 3	10p15.1	10	605319
2057	EPOR	erythropoietin receptor	19p13.2	19	133171
79840	NHEJ1	non-homologous end joining factor 1	2q35	2	611290

DEG, differentially expressed gene; NCBI, National Center for Biotechnology Information; PPI, protein-protein interaction.