Supplementary Material to:

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http://www.landesbioscience.com/journals/cc/article/20863

Supplemental Legends:

Figures S1-2. Ingenuity-based comparison analysis of global TP53 and TP63 interactomes through functions (S1, upper panel) and pathways (S2, lower panel), and STRING-based network analysis (S2).

Tables SI-SIII. List of TP53-specific and TP63-specific and TP53/TP63 common protein interactors identified by protein array chip. Recombinant full-length GST-TP53 (1-393 amino acid residues) and recombinant full-length GST-TP63 (1-680 amino acid residues) were purified from the baculovirus-infected Sf9 insect cells and custom-dissolved in 0.1M sodium phosphate-0.2M NaCl buffer, pH 7.5. 25μg was labeled with Alexa-Flour-647 microscale protein labeling kit. The labeled protein was purified by a BioRad BioGel P-30 Fine size exclusion column chromatography in phosphate buffer saline, and then used for incubation with custom-made protein chip arrays (~16,368 proteins/chip in duplicate). Signal distribution of the bait protein with a chip was plotted using Microsoft Excel software and cut-offs were defined as maximal peak signals (data not shown).

Tables SIV-SV. iTRAQ analysis of cisplatin-induced interactome for TP53 (SIV) and ΔNp63α (SV) in sensitive SCC cells. Quantitative iTRAQ analysis was performed in quadruplicate. Protein complexes from the cells exposed to control medium were labeled with iTRAQ-113, or -114, while protein complexes from the cells exposed to cisplatin were labeled with iTRAQ-115, -116, -117 or -118. Only proteins identified with ITRAQ ratios >1.2 or <0.8 were considered as potential differential interactors.

Tables SVI-SVII. iTRAQ analysis of cisplatin-induced interactome for TP53 (SVI) and ΔNp63α (SVII) in resistant SCC cells. Quantitative iTRAQ analysis was performed in quadruplicate. Protein complexes from the cells exposed to control medium were labeled with iTRAQ-113, or -114, while protein complexes from the cells exposed to cisplatin were labeled with iTRAQ-115, -116, -117 or -118. Only proteins identified with ITRAQ ratios >1.2 or <0.8 were considered as potential differential protein interactors.

Figure S3. The 'Volcano' scatter plot representation of interacting protein candidates obtained from the iTRAQ analysis. 'Volcano' plot showing the distribution of candidate TP53 (A)-, and ΔNp63α (B) -associated protein candidates based on fold change and ANOVA p-values. The x-axis shows the Log_2 of the median normalized iTRAQ ratios between cells transfected with an empty NTAP vector (control) and cells transfected with the NTAP-TP53 (A) or NTAP-ΔNp63α (B) expression cassettes. The fold change is plotted according to average NSC values. The vertical dashed lines indicate the threshold fold change required for protein to be considered > 1.2 or < 0.8. The y-axis shows the $-Log_{10}$ of ANOVA p-values. The horizontal dashed line represents a p-value of 0.05. Arrows point to proteins that were most significantly changed. The ratios represent the comparison between sample with an empty NTAP vector and samples with NTAP-TP53 or NTAP-ΔNp63α.

Figure S4. Ingenuity-based presentation of cisplatin-induced TP53 functions (upper panel) and pathways (lower panel) in sensitive (S) and resistant (R) SCC cells.

Figure S5. Ingenuity-based presentation of cisplatin-induced ΔNp63α functions (upper panel) and pathways (lower panel) in sensitive (S) and resistant (R) SCC cells.

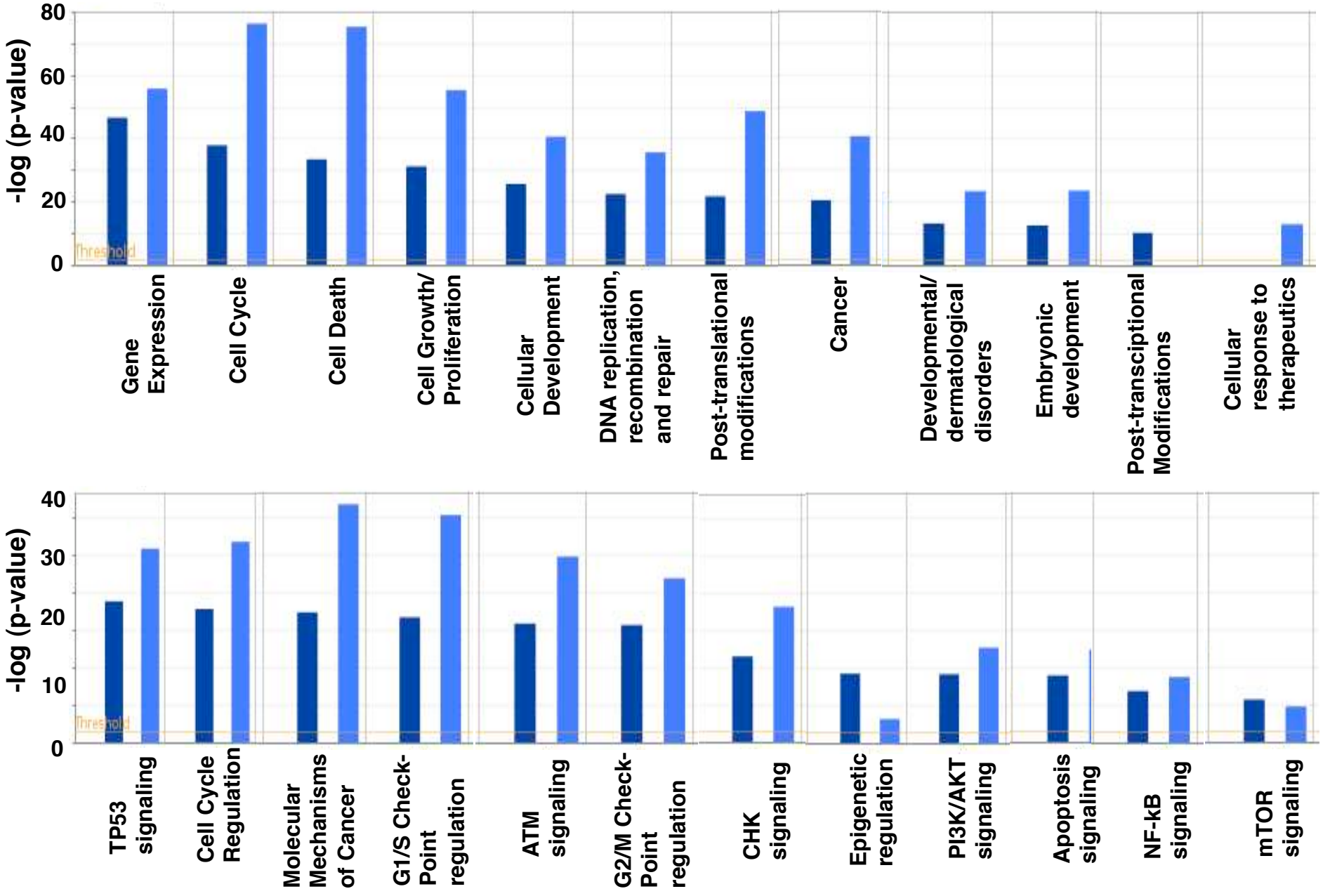
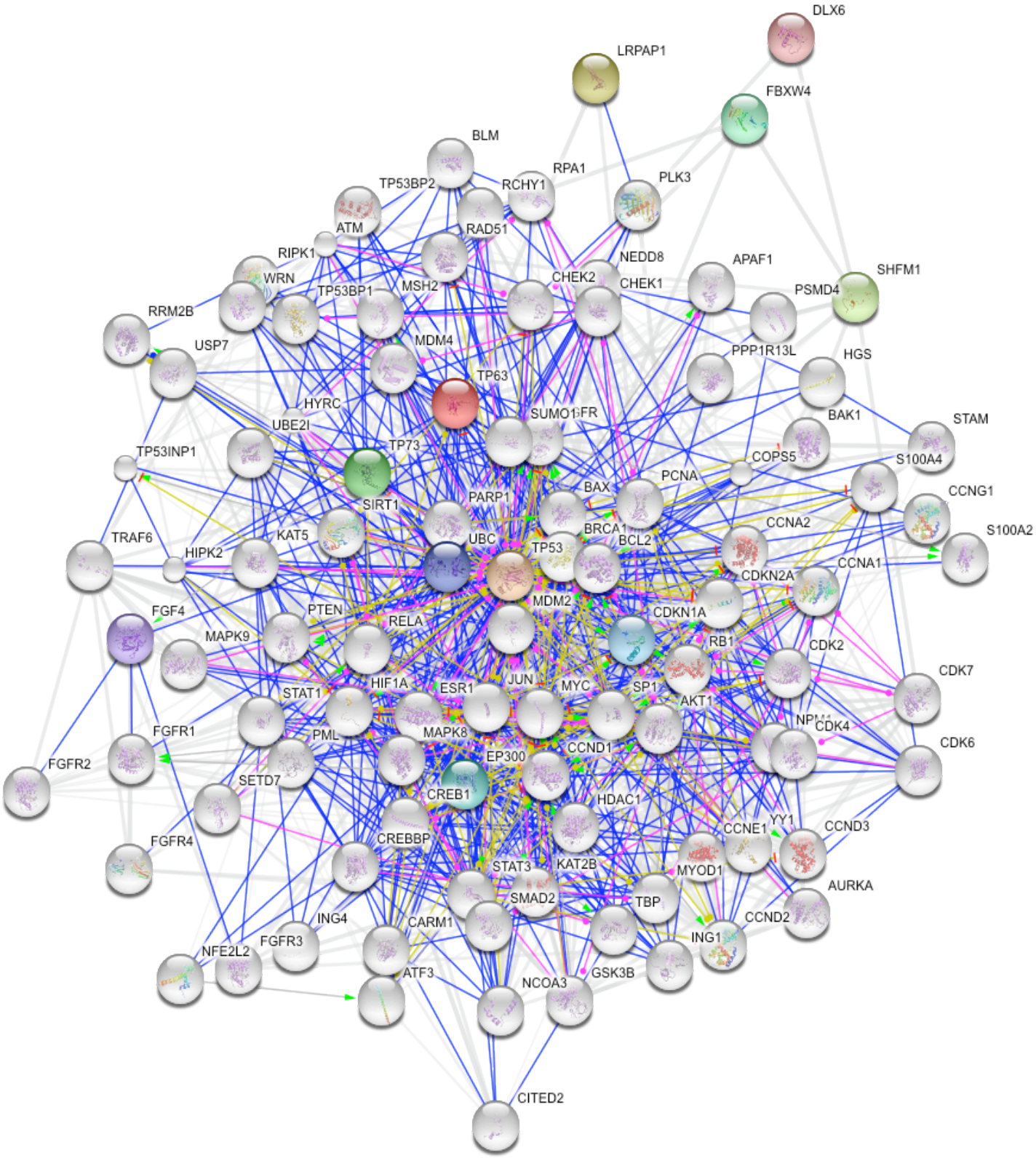


Figure S1.

Figure S2

TP53 family members interactome



Compiled from the STRING9.0 protein interaction database (**http://string.embl.de/)**

Table SI. TP53-specific interacting proteins

Protein Name	Gene Description	Accession Number	Sum of Median 635/2
PHLDA1	apoptosis-associated nuclear protein; pleckstrin like	123094031	13301
SSH1	protein phosphatase Slingshot homolog 1	239047414	13292
DUSP23	dual specificity phosphatase 23	55665709	13255
MAT2B	methionine adenosyltransferase II, beta	37182512	13245
CSRP3	cysteine and glycine-rich protein 3	4502893	13225
DIMT1L	DIM1 dimethyladenosine transferase 1-like	12803983	13213
PPIL3	peptidylprolyl isomerase (cyclophilin)-like 3	14043400	13209
PIN1	peptidylprolyl cis/trans isomerase, NIMA-interacting 1	5453898	13195
PROZ	protein Z, vitamin K-dependent plasma glycoprotein	57208832	13189
UFM1	ubiquitin-fold modifier 1	55663957	13162
ESR2	estrogen receptor 2 (ER beta)	18848208	13152
ADH1B	alcohol dehydrogenase 1B	34577061	13138
PTPN2	protein tyrosine phosphatase, non-receptor type 2	333108231	13128
NMRAL1	NmrA-like family domain containing 1	12804145	13115
PDCD6	programmed cell death 6	29791717	13095
PDLIM3	PDZ and LIM domain 3	20379875	13085
YKT6	YKT6 v-SNARE homolog	197692595	13026
RAD51	RAD51 homolog	49168602	12972
STK16	serine threonine kinase 16	47115287	12964
ERBB2	erb oncoprotein 2	6857751	12940
ERBB4	erb oncoprotein 4	219520060	12887
SSTR2	somatostatin receptor 2	4557859	12720
CABIN1	calcineurin-binding protein cabin-1 isoform a	313151181	12565
HDAC7A	histone deacetylase 7A	169234807	12355
CCNB1IP1	cyclin B1 interacting protein 1	116812640	12147
ARHGAP32	Rho GTPase activating protein 32	218083800	11800
PTEN	phosphatase and tensin homolog	66841735	11719
PPP3R1	protein phosphatase 3, regulatory subunit B, alpha	48145993	11689
RB	retinoblastoma-associated protein	108773787	11665
TANK	TRAF family member-associated NFKB activator	45709985	11624
MXD4	MAX dimerization protein 4	12803751	11561
DDX19B	DEAD (Asp-Glu-Ala-As) box polypeptide 19B	62241022	11358
SIAH1	seven in absentia homolog 1	1809248	11330
PITPNB	phosphatidylinositol transfer protein, beta	47678613	11324
RRAGA	Ras-related GTP binding A	119579057	11316
TRIAP1	TP53 regulated inhibitor of apoptosis 1	7705467	11293
NFE2L2	nuclear factor (erythroid-derived 2)-like 2	301072131	11274
HSPA1L	heat shock protein 1L	124256496	11266
MLH1	DNA mismatch repair protein 1 isoform 1	4557757	11222
HIPK3	homeodomain interacting protein kinase 3	114796624	11211
CDKN1B	cyclin kinase inhibitor 1B	48146915	11179
DDIT2	DNA damage inducible transcript 2	48146193	11127
EDNRB	endothelin receptor type B	123247892	11110
HDAC8	histone acetyltransferase 8	8132878	11066
CDK2AP1	cyclin-dependent kinase 2 associated protein 1	4758188	10990

HINT1	histidine triad nucleotide binding protein 1	48146213	10786
PTGS2	prostaglandin-endoperoxide synthase 2	4678769	10752
PFN2	profilin 2	16753215	10702
MYST1	histone acetyltransferase MYST1	18032214	10596
JPH1	junctophilin 1	21735575	10488
ATF5	activating transcription factor 5	13477390	10455
RAD6	ubiquitin-conjugating enzyme E2B (RAD6 homolog)	67515433	10361
KIF2C	kinesin family member 2C	55961074	10324
CDKN2D	cyclin kinase inhibitor 2D	17981702	10139
SNURF	E3 ubiquitin ligase RNF4 isoform 1	297139777	10086
STMN1	stathmin 1	122890671	9977
PDCD5	programmed cell death 5	4759224	9836
FOXM1	forkhead box M1	42544167	9806
SMAD3	SMAD3	18418623	9690
HSPA8	heat shock protein 8	39645216	9674
ATF2	activating transcription factor 2	20072897	9650
DOK1	DOK1 oncoprotein	109730337	9566
CDC2	cell division cycle 2 homolog	119574595	9459
BHMT2	betaine-homocysteine S-methyltransferase 2	13162290	9304
BAG1	BCL2-associated athanogene	55661641	9274
ITGB1	intergrin B1	89243632	9273
SMAD2	SMAD family member 2	2967646	9263
CCNB1	cyclin B1	14327896	9241
MDM4	p53 binding protein	55960021	9176
CSN3	COP9 signalosome complex subunit 3 isoform 1	23238222	8917
AREG	amphiregulin	179040	8898
FYN	tyrosine-protein kinase Fyn isoform a	4503823	8869
ERCC8	excision repair protein 8	4557467	8803
KPNA4	importin 4	4504901	8795
GPRIN2	G protein regulated inducer of neurite outgrowth 2	112821688	8690
NAT1	N-acetyltransferase 1	114053975	8526
MRE11A	MRE11 meiotic recombination 11 homolog A	5031923	8351
ARF6	ADP-ribosylation factor 6	14286244	8288
JMY	junction-mediating and -regulatory protein	289547556	8276
PAK	p21 protein kinase	780806	8232
PDRG1	p53 and DNA damage regulated 1	18079254	8213
PML	promyelocytic leukemia protein	8815562	8186
MAP3K1	mitogen-activated kinase 3 kinase 1	153945765	8153
REPS1	RALBP1 associated Eps domain containing 1	220742488	8121
SSR3	translocon-associated protein subunit gamma	6005884	8052
TOP2A	DNA topoisomerase 2 alpha	19913406	7948
TOPORS	TOPO I binding E3 protein ligase	55662286	7795
IMB1	importin subunit beta-1	19923142	7637
MSX1	MSH homeobox protein 1	45595674	7541
NQO1	NADPH dehydorgenase, quinone 1	78070376	7495
SMAD4	SMAD family member 4	13603414	7371
APEX1	APEX DNA repair nuclease	18375505	7267
BANP	BTG associated nuclear protein	291084801	7186
KPNA2	karyopherin alpha 2	15865453	7082

BRCA2	breast cancer 2	1161384	7014
IL1	interleukin 1 proprotein	27894330	6979
GPX1	glutathione peroxidase 1	41406084	6922
IGFBP3	insulin-like growth factor-binding protein 3 isoform a	62243248	6790
TOP2B	DNA topoisomerase 2-beta	19913408	6734
CASP1	caspase 1	34783606	6664
PKA	protein kinase A gamma-subunit	189987	6619
PKC	protein kinase C beta type isoform	47157322	6555
RAS	RAF proto-oncogene serine/threonine-protein kinase	4506401	6432
PPP1R13B	protein phosphatase 1 regulatory subunit 13B	187953261	6396
TP53INP1	TP53 inducible nuclear protein 1	15150807	6339
AR	androgen receptor	124375976	6243
CSN6	COP9 signalosome complex subunit 6	34147637	6182
BAK	bcl-2 homologous antagonist/killer	4502363	6163
AURKA	aurora kinase A	126541216	6055
BCL2	B-cell lymphoma 2 protein	72198189	6017
COX6B1	cytochrome C oxidase	4502985	5992
DAPK1	death-associated protein kinase 1	219517989	5975
TSC1	tuberous sclerosis 1 protein	80476713	5934
CCNE1	G1/S-specific cyclin-E1 isoform 1	17318559	5909
IFNA2	interferon alpha 2	119579015	5830
MGA	MAX gene associated	256017163	5779
FLNC	filamin C gamma	119604097	5721
RAB5	ras-related small GTP binding protein Rab5	642532	5693
NRG1	neuregulin 1	47496523	5667
TAOK3	serine/threonine-protein kinase TAO3	148746218	5576
ATR	ataxia telangiectasia and Rad3 related	62087274	5455
TLE1	transducin-like enhancer of split 1	55959469	5419
MYB	MYB oncoprotein	56203202	5392
CDC37	cell division cycle 37	49457492	5364
NTRK1	neurotrophic tyrosine kinase receptor 1	223459656	5299
SRC	src protein kinase	15079460	5272
IGF1R	insulin-like growth factor 1 receptor	219517967	5244
PPP1CC	protein phosphatase 1 catalytic subunit, gamma	4506007	5166
RAD17	cell cycle checkpoint protein RAD17 isoform 1	19718796	5126
PRPK	TP53 regulating kinase	42542637	5097
RASSF1	Ras associated (RalGS/AF-6) family 1	9055143	5036
RBBP8	Rb binding protein 8	21040399	4916
AIFM1	apoptosis inducing factor, mitochnodrial	4757732	4861
BTRC	beta transducin repeat containing protein	57209476	4781
POU4F2	POU domain, class 4, transcription factor 2	110347455	4742
E2F3	E2F transcription factor 3	4503433	4714
SMAD1	SMAD family member 1	1654323	4686
TLE2	transducin-like enhancer 2	21361151	4639
PTK2	protein tyrosine kinase 2	22382094	4593
TDG	thymine DNA glycosylase	23267188	4587
ERBB3	erb oncoprotein 3	12803739	4499
FNTA	farnesyltransferase, isoform alpha	34782840	4421
NCAM1	neural cell adhesion molecule 1	94420689	4387

MAP2K2	mitogen-activated kinase kinase 2	13489054	4269
SERPINA1	serpin peptidase inhibitor A1	15080499	4222
TYRP1	tyrosinase-related protein 1	55661394	4159
CABYR	Ca-binding Y-phosphorylation-regulated protein	24797108	4098
IKZF1	IKAROS family zing finger protein	17390815	4008
AHR	aryl hydrocarbon receptor	47682748	3932
MAX	MAX oncoprotein	34470	3883
BCL2L1	B-cell lymphoma 2-lke 1	56204045	3771
CASP8	caspase 8	45751586	3721
CCNT2	cyclin T2	89130720	3679
CDK17	cyclin-dependent kinase 17	37595545	3623
DST	dystonin	56203389	3532
FASN	fatty acid synthase	38196977	3498
VEGFA	vascular endothelial growth factor A	110611814	3412
ING1	inhibitor of growth family, member 1	55957788	3387
BARD1	BRCA1-associated RING domain 1, BARD1	32949402	3298
GPS2	G protein pathway suppressor 2	4758472	3243
KLF6	Krueppel-like factor 6 isoform A	37655157	3221
ANM1	protein arginine N-methyltransferase 1 isoform 1	154759421	3201
PFDN5	prefoldin subunit 5	22202633	2956
RAD9A	cell cycle checkpoint control protein RAD9A	4759022	2834
MDC1	mediator of DNA damage checkpoint 1	168985671	2802
CCNA2	cyclin A2	47115321	2789
CDK3	cyclin-dependent kinase 3	4557439	2734
SP3	Sp3 transcription factor	38373693	2716
SP2	Sp2 transcription factor	125625357	2676
APC	adenomatous polyposis coli protein	306922386	2643
PEA15	phosphoprotein enriched in astrocytes	55957229	2589
NEEP21	neuron-specific protein family member 1	91932788	2556
BCLX	bcl-2-like protein 1 isoform 1	20336335	2532
E2F6	E2F transcription factor 6	109637795	2513
BRE	BRCA1-A complex subunit BRE isoform 1	21361171	2487
MAD3L	MAD3/BUB1-related protein kinase	2981235	2449
HSP90B	heat shock protein 90B	20149594	2432
STRADB	STE20-related kinase adaptor beta	13027388	2367
DHX9	dead box polypeptide 9	187952519	1712
PSMD2	proteasome 26 subunit, non-ATP-ase 2	25777602	1656
BTK	Bruton tyrosine kinase	4557377	1599
SETD7	histone-lysine N-methyltransferase SETD7	18139549	1587
PTTG1	pituitary tumor-transforming 1	118764207	1543
FAK1	focal adhesion kinase 1 isoform a	24476013	1523
BRCC3	RCA1/BRCA2-containing complex, subunit 3	150171085	1479
GNL3	guanine nucleotide-binding protein-like 3 isoform 1	45593130	1446
FXYD6	FXYD domain-containing ion transport regulator 6	258679518	1405
CDH3	P-cadherin	116283998	1386
STK4	serine/threonine kinase 4	66347271	1371
THAP8	THAP domain-containing protein 8	22749337	1368
ALOX12	arachidonate 12-lipoxygenase	41324132	1356
ANXA3	annexin 3	4826643	1354

GHR	glucocorticoid receptor	4503993	1351
BTBD2	BTB/POZ domain-containing protein 2	20127580	1348
RFA1	E3 ubiquitin-protein ligase NEDD4-like isoform 1	222352086	1344
HSP27	heat shock protein 27	11036357	1342
CDH1	E-cadherin	146327038	1339
WDR33	WD repeat-containing protein 33 isoform 1	56243590	1337
LAMA4	laminin, alpha 4	55960320	1336
SCAM1	SORBS3 sorbin and SH3 domain containing 3	127799395	1335
WWOX	WW domain-containing oxidoreductase isoform 1	7706523	1334
HTT	huntingtin	90903231	1333
ASNA1	ATPase ASNA1	50428938	1332
VRK1	serine/threonine-protein kinase VRK1	4507903	1331
DDX5	dead box polypeptide 5	197692465	1330
SYVN1	E3 ubiquitin-protein ligase synoviolin isoform a	27436925	1329
CASP3	caspase 3	14790115	1328
APTX	aprataxin	55958014	1328
FBLN4	EGF-containing fibulin-like extracellular matrix protein	14714634	1328
HSPA8	heat shock protein 8	48257068	1327
NUCL	lysosomal acid lipase/cholesteryl esterase	187152	1326
MAP1LC3B	microtubule-associated proteins 1A/1B light chain 3B	12383056	1326
HUWE1	HECT, UBA and WWE domain containing 1	57210076	1323
RAB4A	member RAS oncogene family	56205909	1323
RIR2B	ribonucleoside-diphosphate reductase subunit M2 B	42544136	1322
GIT2	G protein-coupled recep. kinase interacting ArfGAP 2	49065562	1322
TRAK1	trafficking protein, kinesin binding 1	45359873	1322
ASH2L	ASH-like protein 2	4210447	1321
OGT	O-GlcNAc transferase p110 subunit	32307148	1320
RABGGTA	Rab geranylgeranyltransferase, alpha subunit	49456551	1319
CDC123	cell division cycle 123 homolog	55960598	1319
MPPE1	metallophosphoesterase 1	12804049	1319
DNAJB6	DnaJ (Hsp40) homolog, subfamily B, member 6	49065422	1318
CAPZB	capping protein (actin filament) muscle Z-line, beta	56417839	1318
PCID2	PCI domain containing 2	55957808	1318
BYSL	bystin-like protein	29792064	1317

Table SII. TP63 interacting proteins

Protein Name	Protein Description	Accession Number	Sum of Media 635/2
LRRC8D	leucine rich repeat containing 8 family, member D	55663683	24113
OVOL2	transcription factor Ovo-like 2; zinc finger protein 339	55957199	21644
HNRNPA/B	heterogeneous RNP protein A/B	55956919	20017
SF3B4	splicing factor 3b, subunit 4	55960587	19807
RUNX2	Runt-related transcription factor 2	56205907	19310
LIN7B	lin-7 homolog B	11545920	19079
AMBRA1	autophagy/beclin-1 regulator 1	50843827	18775
POLR2D	polymerase (RNA) II (DNA directed) polypeptide D	62739756	18735
SSRP1	structure specific recognition protein 1	13477285	18640
CHMP1B	chromatin modifying protein 1B	119621980	18541
WIPF1	WAS/WASL interacting protein family, member 1	38373695	18359
TWF2	twinfilin, actin-binding protein, homolog 2	16741225	18351
LRRFIP1	leucine rich repeat (in FLII) interacting protein 1	80474548	18328
TRAPPC2L	trafficking protein particle complex 2-like	7706429	18205
ITCH	E3 ubiquitin-protein ligase Itchy homolog	27477109	18190
CRABP2	cellular retinoic acid binding protein 2	315013542	18027
ARIH2	E3 ubiquitin-protein ligase ARIH2	5453557	17996
EIF4A2	eukaryotic translation initiation factor 4A2	16740867	17897
POP7	processing of precursor 7, ribonuclease P/MRP subunit	12655151	17789
PELI2	pellino 2 protein	10242353	17573
SHMT1	serine hydroxymethyltransferase 1	22547186	16935
EFTUD2	116 kDa U5 small nuclear RNP component isoform a	217272892	16789
GFRA1	GDNF family receptor alpha 1	4885269	16500
MAP1LC3B	microtubule-associated protein 1 light chain 3 beta	12383056	16441
FGFR2	fibroblast growth factor receptor 2	1296625	16382
ZMYND11	zinc finger, MYND-type containing 11	168984627	16290
EIF3G	eukaryotic translation initiation factor 3, subunit G	49472822	15647
SNAPC1	small nuclear RNA activating complex, polypeptide 1	4507101	15334
PRAME	preferentially expressed antigen in melanoma	46249373	15252
DERL2	degradation in endoplasmic reticulum protein 2	31455614	15222
IFNAR2	interferon beta receptor type 2	49456591	14991
PTRF	polymerase I and transcript release factor	42734430	14762
CLP1	cleavage and polyadenylation factor I subunit, homolog	12653353	14410
HNRPUL1	heterogeneous nuclear ribonucleoprotein U-like 1	21536326	14345
SSBP3	single stranded DNA binding protein 3	56204255	14313
RCVRN	cancer-associated retinopathy protein	326205427	14175
CETN2	centrin, EF-hand protein, 2	119593306	14100
HINFP	histone H4 transcription factor	39725948	14017
MIF4GD	MIF4G domain-containing protein isoform 1	335334986	13823
SOCS6	suppressor of cytokine signaling 6	21450785	13582
NECAP1	NECAP endocytosis associated 1	84570053	13515
APOBEC1	apolipoprotein B mRNA editing enzyme catal. polyp. 1	66365008	13269
SNRPA	U1 small nuclear ribonucleoprotein A	4759156	13158
KDELC1	KDEL motif-containing ER protein 1	55957419	13090
SREBF1	sterol regulatory element binding transcription factor 1	52630419	12999

STAU2	staufen, RNA binding protein, homolog 2	14249967	11063
KRT6A	keratin 6A	141795139	10123
SNUPN	RNA U transporter 1, snuportin 1	110611149	9897
ULK2	serine/threonine-protein kinase ULK2 (ATG1B)	217330559	9454
GEMIN6	gem (nuclear organelle) associated protein 6	41393577	9121
TRIP13	thyroid hormone receptor interactor 13	48145605	8956
SHFM1	split hand/foot malformation (ectrodactyly) type 1	51094880	8012
ODAM	odontogenic, ameloblast asssociated	17389519	7934
ATG4B	cysteine protease ATG4B isoform a	47132611	7656
RPAIN	RPA interacting protein	13325269	7453
STAM	signal transducing adaptor molecule	4507249	6954
HNRPA0	heterogeneous nuclear ribonucleoprotein A0	5803036	6764
DKC1	dyskeratosis congenita 1, dyskerin	14603090	6755
DLX3	distal-less homeobox 3	4885185	6734
MTF1	metal-regulatory transcription factor 1	119627717	6674
CBFA2T3	core-binding factor, runt domain alpha	28872803	6633
TARDBP	TAR DNA binding protein	56204104	6609
RUNX1	Runt-related transcription factor 1	223459612	5912
BRD2	bromo-domain containing protein 2	168985018	5768
HDAC9	histone deacetylase 9	85057087	5526
ATG14	beclin 1-associated autophagy-related protein 14	219842182	5508
GOPC	Golgi-associated PDZ and coil domain	55710286	5409
DDIT3	DNA damage inducible transcript 3	304282231	5391
KAT2B	histone acetyltransferase 2B	40805843	5361
DEK	DEK oncoprotein	123231494	5356
SCAF4	SR-related CTD associated factor 4	40789229	5341
CHD4	chromodomain helicase DNA binding protein 4	51599156	5324
RNPC1	RNA-binding protein 38 isoform a	34577107	5321
STAT3	signal transduction activator of transcription 3	21618340	5319
PPP2R5A	B56 regulatory subunit, protein phosphatase 2A	315113860	5299
ARID1A	AT rich interactive domain 1A	56205619	5257
CTNNB1	catenin beta	148233338	5232
SF1	splicing factor 1	42544130	5218
STXBP4	syntaxin-binding protein 4	63999048	5217
DNMT3A	DNA methyltransferase 3A	28559069	5215
SOX2	SRY (sex determining region Y)-box 2	119598760	5214
SNAPC4	small nuclear RNA activating polypeptide 4	92859678	5211
EZH2	enhancer of zeste homolog 2	1438064	5195
LSH/HELLS	lymphoid-specific helicase	21914927	5166
SMARCC1	SWI/SNF regulator of chromatin 1	188536047	5146
NFKBIA	NF-kappa-B inhibitor alpha	10092619	5132
FUBP1	far upstream element binding protein 1	17402900	5108
ZEB1	zinc finger E-box binding homeobox 1	55957123	5100
IRF6	interferon regulatory factor 6	188536047	5090
NRIP1	nuclear receptor interacting protein 1	57232746	5080
HEY2	hairy/enhancer of split 2	6912414	5029
DNMT3B	DNA methyltransferase 3B	5748522	5026
CTDP1	RNA polymerase II phosphatase 1	67188445	5019
MECP2	Methyl CpG binding protein 2	4826830	5010

ATF7IP2	activating transcription factor 7 interacting protein 2	38569430	5008
GAB2	GRB2-associated-binding protein 2 isoform a	18105042	5004
UFD2A	ubiquitin conjugation factor E4 B isoform 1	157739864	4998
NAC1	nucleus accumbens-associated protein 1	16418383	4998
FBW7	F-box/WD repeat-containing protein 7 isoform 1	16117781	4996
N4BP1	NEDD4-binding protein 1	48928019	4994
HNRNPK	heterogeneous nuclear ribonucleoprotein K	55958547	4989
NONO	non-POU domain contain, octamer bind	224028244	4981
STAT2	signal transduction activator of transcription 2	4885615	4975
ZNF24	zinc finger protein 24	190610012	4962
TAF1B	TBP-associated factor RNA polymerase I, subunit B	205360987	4903
CHUK	inhibitor of nuclear factor kappa-B kinase subunit alpha	62241001	4895
SBLP	histone RNA hairpin-binding protein	5729862	4890
BRF1	transcription factor IIIB 90 kDa subunit isoform 1	22035556	4886
NIR	nucleolar complex protein 2 homolog	157694511	4881
EPHA3	ephrin receptor EPHA3 complete form	12003435	4877
SYNCRIP	synaptotagmin binding, cyto-RNA interacting protein	228008291	4853
DMAP1	DNMT1 associated protein 1	56203069	4511
CARM1	histone-arginine methyltransferase CARM1	40288288	4443
TCF12	transcription factor 12	46370082	4401
HBP1	HMG-box transcription factor 1	18490183	4394
KRT1	keratin 1	11935049	4387
HUS1	Hus1 checkpoint homolog	4758576	4323
HNRNPR	heterogeneous RNP R	56203529	4298
TAF9B	TAF9B RNA polymerase II	20070280	4256
ARID3A	AT rich interactive domain 3A	20070280	4235
HNRNPL	heterogeneous RNP L	52632383	4201
TTF1	transcription termination factor, RNA polymerase I	33356179	4197
RECQ3	RecQ helicase 3	110735439	4143
KLF4	Kruppel-like factor 4	220732387	4066
RCOR1	Rest corepressor 1	7661892	3678
RPH3AL	rab effector Noc2 isoform 1	298676510	3599
KRT9	keratin 9 (epidermolytic palmoplantar keratoderma)	119581148	3521
CLDN1	claudin 1	4559278	3513
SHISA5	Scotin	33876247	3504
TLR3	toll-like receptor 3 precursor	4507531	3431
NTN1	netrin 1	119610438	3415
EPHA2	EPH receptor A2	22713539	3363
IGF2BP1	insulin-like growth factor 2 mRNA-binding protein 1	56237027	3337
TRAF4	TNF receptor-associated factor 4	22027622	3324
DEC	deleted in esophageal cancer 1	2308997	3287
MAP1A	microtubule-associated protein 1A	95147555	3221
POU2F3	POU domain, class 2, transcription factor 3	148664218	3199
SPEN	spen-homolog transcription regulator	55665414	3121
SPATA18	SPATA18 protein	23138670	3099
KRT5	keratin 5	18999435	3078
NCL	nucleolin	31455187	3055
HLTF	helicase-like transcription factor	21071054	3023
CHTOP	chromatin target of PRMT1 protein isoform 1	28875797	2733

Table SIII. TP53/TP63 common interacting proteins

Protein Name	Protein Description	Accession Number	TP53 Signals Sum of Median 635/2	TP63 Signals Sum of Median 635/2
H3	histone H3	386772	13074	18434
BECN1	Autophagy-like 6 protein, beclin 1	4502395	12997	18327
BCCIP	BRCA2 and CDKN1A interacting protein, isoform alpha	7706581	12877	17001
H4	histone H4	77539758	12842	16953
TP53	tumor protein p53	187233962	12828	15088
SAFB1	scaffold attachment factor B, isoform 1	321267469	12807	15072
AKT1	AKT oncoprotein 1	18027298	12789	14779
CHEK2	CHK1 checkpoint kinase 2	47678367	12775	14406
TP63	tumor protein p63	31543818	12745	14363
SIRT5	NAD-dependent acetylase, sirtuin 5	6912664	12739	14067
H2AFZ	H2A histone family, member Z	74355514	12660	13811
CDC42	cell division cycle 42 homolog	4757952	12646	13689
IGFBP6	insulin-like growth factor binding protein 6	11321593	12627	13631
STK11	serine-threonine kinase 11, LKB1	4507271	12602	13610
SUMO1	SMT3 suppressor of mif two 3 homolog 1	42490984	12576	13330
TAF6L	p300/CBP-associated factor-associated factor 6L	5453844	12548	13113
WWP2	WW domain containing E3 ubiquitin protein ligase 2	40806207	12526	13064
RAN	RAN, member RAS oncogene family	47496641	12505	12092
GRB2	growth factor receptor-bound protein 2	3850302	12494	11934
NFIC	nuclear factor I/C (CCAAT-binding transcription factor)	15082410	12482	11275
CDKN2A	cyclin kinase inhibitor 2A	55665308	12446	10807
GAS2	growth arrest-specific 2	29540559	12430	10733
SUMO3	SMT3 suppressor of mif two 3 homolog 3	12652587	12414	10567
CITED1	Cbp/p300-interacting transactivator 1	222136692	12380	10345
CKAP2	cytoskeleton associated protein 2	148664244	12324	9654
CHEK1	checkpoint kinase 1	13278882	12305	9312
BIN3	bridging integrator 3	8923904	12301	9023
GSK3B	glycogen synthase kinase 3B	21361340	12268	8912
HAT1	histone acetyl transferase 1	38614185	12214	8867
ID3	inhibitor of DNA binding 3 protein	3219578	12206	8564
SKAP2	src kinase associated phosphoprotein 2	16753212	12185	8342
CDK5	cyclin-dependent kinase 5	4826675	12160	8121
HMGN1	high mobility group nucleosome binding domain 1	78070343	12076	7323
CLINT1	clathrin interactor 1	307078123	12048	7212
DIABLO	diablo, IAP-binding mitochondrial protein	9845297	12123	7022
NFYB	nuclear factor YB	5453780	12013	6785
SNW1	SNW domain containing 1	6912676	11985	6761
PRMT2	protein arginine methyltransferase 2	46255049	11948	6749
RBX1	E3 ubiquitin-protein ligase	7657508	11903	6727
ATM	ataxia telangiectasia mutated kinase	1185510	11842	6698
TRIM28	E3 SUMO protein ligase	13436401	11822	6696
STUB1	E3 ubiquitin-protein ligase CHIP	56181387	11813	6685
NFYA	nuclear factor YA	56417679	11778	6644
CABLES1	Cdk5 and Abl enzyme substrate 1	24308408	11759	6639
CDK2	cyclin dependent kinase 2	16936528	11700	6619
HDAC2	histone deacetylase 2	293336691	11592	5565
KAT5	histone acetyltransferase KAT5 isoform 1	36287069	12203	5512
MAPK9	mitogen-activated protein kinase 9 isoform JNK2 beta 1	21237742	11498	5490
HIPK2	homeodomain interacting protein kinase 2	164420685	11460	5423
WT1	Wilms tumor 1 protein	896247	10969	5398
SIRT2	NAD-dependent deacetylase, sirtuin 2	13775600	11438	5382
NFKB1	nuclear factor NF-kappa-B p105 subunit isoform 1	34577122	11427	5377
NR4A1	nuclear receptor subfamily 4, group A	27894344	11387	5371
HDAC1	histone deacetylase 1	13128860	11371	5367
RPS6KB1	ribosomal protein S6 kinase	31418467	11308	5301
NCOR1	nuclear corepressor 1	35193218	11251	5239
EP300	E1A binding protein, histone acetyltransferase p300	50345997	11216	5210

PRKAA1	cAMP-activated protein kinase, subunit 1	94557301	11151	5207
CREBBP	CREB binding protein	4321116	11015	5203
ATF3	activating transcription factor 3	55665721	10875	5188
TAF1	TATA box binding protein associated factor 1	20357585	10856	5142
MAPK8	mitogen-activated protein kinase 8 isoform JNK1 beta 1	20986519	10837	5126
TBP	TATA-box binding protein	31652304	10808	5113
DNMT1	DNA methyltransferase 1	195927037	10738	5097
HDAC6	histone deacetylase 6	13128864	10724	5092
HSPA4	heat shock 70 kDa protein 4	38327039	10697	5072
SMARCA4	SWI/SNF, matrix associated regulator chromatin, 4	223460528	10661	5068
CREB1	cAMP responsive element binding protein 1	14714956	10615	5036
HMGA1	high mobility group AT-hook 1	39645541	10580	5025
YES1	tyrosine-protein kinase Yes	4885661	10537	5020
TFDP1	transcription factor DP1	57162469	10520	5016
YBX1	Y-box binding protein 1	14714588	10509	5009
PIM2	serine/threonine-protein kinase pim-2	42821112	10419	4997
E2F1	transcription factor E2F1	12669911	10390	4990
PNRC2	proline-rich nuclear receptor coactivator 2	55961037	10354	4986
SP1	transcription factor Sp1 isoform a	38372901	10306	4970
TRRAP	transformation/transcription domain-associated protein	4507691	10294	4960
RELA	Rel-A, transcription factor p65 isoform 1	223468676	10262	4959
MDM2	E3 ubiquitin protein ligase	155183770	10236	4945
FBXO11	F-box only protein 11 isoform 1	30089926	10214	4922
H2AX	Histone H2AX	4504253	10196	4916
MYCBP	c-myc binding protein	57242777	10175	4915
NEDD8	ubiquitin-like protein	47115261	10159	4905
TOP1	DNA topoisomerase 1	11225260	10117	4900
CK1	casein kinase 1	4388767	10109	4899
MAPK1	mitogen-activated kinase 1	66932916	10061	4861
NLK	serine/threonine-protein kinase NLK	149408126	9924	4852
YY1	transcriptional repressor protein YY1	4507955	9852	4851
RCHY1	E3 protein ligase	15930039	9850	4840
NCOA5	nuclear receptor coactivator 5	15147335	9822	4823
SMU1	smu-1 suppressor of mec-8/unc-52, spliceosome	12804047	9769	4810
ELL	RNA polymerase II elongation factor ELL	5729812	9719	4805
HMGB1	high mobility group box 1	55958713	9715	4735
SIN3B	transcription regulator	39793970	9613	4683
SKP1	S-phase kinase associated protein 1	25777711	9536	4623
ULK1	serine/threonine-protein kinase ULK1	4507831	9469	4587
ACIN1	apoptotic chromatin condensation inducer 1	7662238	9375	4487
DNMT1	DNA methyltransferase 1 isoform a	195927037	9269	4267
DAXX	DAXX protein	2253709	9243	4218
CHRAC1	chromatin accessibility complex protein 1	8393116	9208	4209
ABL	tyrosine-protein kinase ABL1 isoform a	62362414	9195	4178
CDC25C	cell division cycle 25C homolog	39843081	9144	4156
PRKDC	DNA activated protein kinase	13936336	9079	4121
SIN3A	SIN3 homolog A, transcription regulator	187953437	9019	4099
PIAS	protein inhibitor of activated STAT	5533373	9008	4015
S100B	S100 calcium binding protein B	12804681	8967	3999
UVRAG	UV-radiation resistance associated gene	21687212	8823	3876
SETD7	histone-lysine N-methyltransferase SETD7 [Homo sapie	18139549	8814	3787
UBA7/UBE2	ubiquitin-like modifier-activating enzyme 7	38045948	8777	3565
RIPK3	receptor-interacting serine-threonine kinase 3	40254844	8723	3531
RPTOR	regulatory-associated protein of mTOR isoform 1	22094987	8686	3497
FOXA3	F-box protein A3	160431602	8596	3487
CDK9	cyclin-dependent kinase 9	4502747	8554	3465
CUL1	Cullin 1	32307161	8514	3452
H1	histone H1	184072	8421	3443
HIPK1	homeodomain interacting protein kinase 1	56206715	8070	3429
HIF1A	hypoxia inducible factor 1 alpha, isoform 1	4504385	8010	3421
HECTD3	HECT domain containing 3	157738609	7907	3403
NR3C1	nuclear receptor subfamily 2 C1	76057154	7713	3396

PARP1	poly ADP ribose polymerase 1	156523968	7448	3387
CJUN	Jun oncoprotein	40226267	7206	3375
NR4A1	nuclear receptor subfamily 4, group A	27894344	6892	3351
ASPP1	apoptosis-stimulating of p53 protein 1	121114287	6827	3346
TRIM63	E3 ubiquitin protein ligase	19924163	6515	3316
YAP1	Yes-associated protein 1	23398532	6481	3305
TP53BP2	TP53 binding protein 2	211830458	6307	3265
RFX5	regulatory factor 5	4557843	6267	3245
PPP2R4	protein phosphatase 2A activator, subunit 4	220732362	6262	3234
BRCA1	breast cancer 1	1698399	6227	3215
CDK6	cyclin-dependent kinase 6	223718134	6104	3207
PSME3	proteasome activator complex subunit 3 isoform 1 [Hor	30410794	5874	3187
SMG1	SMG1 kinase	62243658	5509	3176
SMC1A	structural maintenance of chromosome	51327185	5483	3166
NFAT5	nuclear factor 5	124297941	5217	3154
NUAK1	SNF1-like kinase 1	7662170	5203	3143
CDK1	cyclin-dependent kinase 1	4502709	4998	3137
EGFR	epidermal growth factor receptor	63101670	4521	3123
NFKBIA	NF-kappa-B inhibitor alpha	14029101	4314	3115
BMI1	BMI1 polycomb ring finger oncogene	55958277	3841	3109
CAPRIN1	cell cycle-associated protein-1 isoform 1	42558250	3528	3102
S100A8	S100 calcium binding protein A8	21614544	3443	3087
BCOR	BCL-6 corepressor isoform a	183396783	3323	3067
UBE2D1	ubiquitin-conjugating enzyme E2D1, isoform 1	4507773	2921	3013
USP7	ubiquitin carboxyl-terminal hydrolase 7	150378533	2878	3005
RAB5	ras-related small GTP binding protein Rab5	642532	2614	2987
GAP43	growth-associated protein 43	56410855	2417	2834
UBB	ubiquitin B	54887368	1689	2832
RPS6KA5	ribosomal protein S6 kinase alpha-5 isoform a	32528295	1618	2765
PRMT5	protein arginine N-methyltransferase 5 isoform a	20070220	1561	2754
USP47	ubiquitin carboxyl-terminal hydrolase 47	71774197	1721	2721
S100B	S100 calcium binding protein B	5454034	1426	2702
SKI	SKI oncoprotein	33348840	1361	2678
SP100	SP100 nuclear autoantigen	122939208	1330	2664
PCNA	proliferating cell nuclear antigen	387005	1329	2634
UBE2H	ubiquitin-conjugating enzyme E2H isoform 1	4507783	1328	2614
PLK1	polo-like kinase 1	21359873	1327	2598
TUBA	alpha tubulin	37781283	1320	2578

Table SIV. TP53 interacting proteins in sensitive SCC (wild type p63) cells upon cisplatin exposure

Description	Accession	MW [kDa]	5: 114/11	4/113	**5: 115/11**	5/113	**: 116/11**	6/113	**15/111**	**: 117/11**	7/113	**: 118/11**	8/113	**17/111**	calc. pI	Coverage	# PSMs	#Pepti	Score A3	overage A	PSM	ptide	Score A4	verage A	PSM	ptides
tumor protein p53 [Homo sapiens], TP53	23491729	51.5	1.119	8	**2.687**	8	**2.797**	8	0.89	**2.633**	8	**2.655**	8	0.98	7.48	12.37	8	2	311.24	15.71	7	3	102.81	11.27	6	3
dual specificity mitogen-activated protein kinase kinase 1 [Homo sapiens], MAP2K1	5579478	45.9	1.040	3	**2.452**	3	**2.420**	3	0.84	**2.255**	3	**2.339**	3	0.94	7.42	12.65	6	2	177.59	11.65	3	2	127.64	12.15	3	2
transforming acidic coiled-coil containing protein 1 [Homo sapiens], TACC1	170763517	88.8	1.046	10	**2.346**	11	**2.260**	11	0.81	**2.332**	11	**2.266**	11	1.12	7.97	15.35	16	3	228.29	11.75	6	4	128.63	11.66	4	3
RAD51 homolog [Homo sapiens], RAD51	5733658	39.8	1.059	6	**2.293**	6	**2.308**	6	0.84	**2.232**	6	**2.267**	6	1.18	7.92	15.50	6	2	268.25	15.35	9	3	158.16	15.35	4	2
mitohen-activated protein kinase kinase 7 [Homo sapiens], MAP7K2	3108199	46.7	1.160	5	**2.165**	5	**2.145**	5	0.89	**2.116**	5	**2.334**	5	0.83	5.29	23.94	8	2	194.50	23.94	3	2	88.90	23.94	5	2
serine/threonine protein kinase 11 [Homo sapiens], STK11	4507271	48.8	1.180	4	**2.127**	4	**2.136**	4	1.20	**2.109**	4	**2.173**	4	0.90	5.55	14.80	9	4	187.64	12.50	4	3	108.47	14.80	5	4
cyclin kinase inhibitor 2D [Homo sapiens], CDKN2D	17981702	18.7	1.067	1	**2.028**	1	**2.108**	1	0.95	**2.059**	1	**2.084**	1	1.05	5.88	20.63	2	1	558.50	15.13	1	1	301.19	16.31	1	1
serine/threonine protein kinase ATR [Homo sapiens], ATR	157266317	290.1	1.018	18	**1.968**	18	**1.978**	18	0.88	**1.985**	18	**1.936**	18	1.08	5.76	1.86	16	10	62.89	1.86	1	1	46.48	1.86	12	8
apoptosis-stimulating of p53 protein 1 [Homo sapiens], ASPP1	121114287	109.8	1.089	13	**1.925**	3	**1.939**	13	1.12	**1.918**	13	**1.971**	13	0.95	4.81	6.56	8	5	84.39	6.56	2	1	126.03	6.56	6	3
diablo homolog, mitochondrial isoform a [Homo sapiens], SMAC/DIABLO	9845297	29.6	1.161	1	**1.910**	1	**1.903**	1	0.98	**1.936**	1	**1.950**	1	0.92	6.33	3.49	3	2	67.48	3.49	2	2	29.91	1.96	1	1
NF-kappa B essential modulator isoform a [Homo sapiens], NEMO	4504631	47.5	1.093	1	**1.907**	1	**1.911**	1	1.15	**1.901**	1	**1.947**	1	0.85	10.36	10.14	1	1	19.34	5.79	1	1	46.01	10.14	1	1
mitogen-activated protein kinase kinase kinase 4 isoform a [Homo sapiens], MEKK4	55956904	178.9	1.160	11	**1.895**	1	**1.803**	11	0.97	**1.826**	11	**1.864**	11	0.92	6.33	4.19	8	5	67.48	4.11	2	2	29.91	1.96	6	3
histone acetyltrasferase KAT5 isoform 1 [Homo sapiens], KAT5	36287069	59.6	1.078	9	**1.891**	10	**1.648**	10	1.00	**1.708**	9	**1.606**	10	0.95	6.64	38.03	9	4	1926.45	38.03	34	9	949.07	20.74	10	4
apoptosis-stimulating of p53 protein 2 [Homo sapiens], ASPP2	112799849	121.5	1.166	10	**1.869**	1	**1.801**	10	0.98	**1.822**	10	**1.830**	10	0.94	6.39	5.12	7	2	74.48	3.89	2	1	47.84	3.15	5	2
growth arrest and DNA damage-inducible protein 45 beta [Homo sapiens], GADD45B	86991436	21.5	1.062	4	**1.866**	4	**1.809**	4	0.83	**1.806**	4	**1.817**	4	0.80	9.20	9.90	6	2	57.15	9.90	2	2	65.47	9.90	4	2
transcription factor E2F1 [Homo sapiens], E2F1	12669911	56.4	1.019	9	**1.846**	9	**1.801**	9	1.08	**1.801**	9	**1.807**	9	1.16	5.33	28.05	10	4	486.50	28.05	9	4	236.61	28.05	9	4
high mobility protein B1 [Homo sapiens], HMGB1	248145843	26.1	1.093	1	**1.824**	1	**1.796**	1	1.15	**1.794**	1	**1.809**	1	1.12	5.10	11.40	1	1	642.27	10.31	14	5	207.14	11.40	1	1
DNA damage-inducibke transcript 4 [Homo sapiens], DDIT4	9506687	25.5	1.063	1	**1.803**	1	**1.782**	1	0.94	**1.714**	1	**1.783**	1	0.90	9.85	7.75	1	1	32.53	14.45	1	1	44.48	7.75	1	1
histone acetyltransferase KAT2B [Homo sapiens], KAT2B	40805843	91.4	1.085	4	**1.789**	4	**1.734**	4	0.97	**1.711**	4	**1.909**	4	1.10	4.98	11.16	4	4	542.97	9.13	15	6	436.87	11.16	20	8
Axin [Homo sapiens], AXIN	14336691	99.4	1.028	10	**1.741**	10	**1.749**	10	0.91	**1.648**	10	**1.742**	10	1.00	6.62	22.65	10	9	504.31	18.58	11	7	69.60	14.50	5	5
stratifin [Homo sapiens], SFN	49456807	28.3	1.029	7	**1.739**	7	**1.735**	7	0.86	**1.615**	7	**1.609**	7	1.03	7.52	12.98	7	3	165.66	12.98	5	3	114.98	12.98	7	3
activating enhancer binding protein 2 alpha isoform a [Homo sapiens], TFAP2A	4507441	48.5	1.185	6	**1.736**	6	**1.760**	6	0.81	**1.533**	11	**1.666**	6	1.12	7.97	15.35	6	3	268.25	15.35	6	3	158.16	15.35	4	3
myc box-dependent-interacting protein/bridging interactor 1 [Homo sapiens], BIN1	21536400	65.9	1.089	3	**1.718**	3	**1.704**	3	0.83	**1.618**	3	**1.580**	3	1.02	7.01	49.03	9	8	3911.15	38.41	15	13	1804.71	40.34	8	5
regulatory-associated protein of mTOR isoform 1 [Homo sapiens], RPTOR	22094987	125.8	1.044	4	**1.702**	4	**1.646**	4	0.85	**1.644**	4	**1.604**	4	1.15	8.54	13.43	8	5	367.22	11.51	11	4	116.66	8.87	7	4
TP53 inducible nuclear protein 1 [Homo sapiens] TP53INP1	15150807	26.5	1.135	4	**1.696**	4	**1.648**	4	0.81	**1.636**	4	**1.642**	4	1.15	8.35	13.43	6	5	367.22	11.51	11	4	116.66	8.87	7	4
5'-AMP-activated protein kinase catalytic subunit alpha-1 isoform [Homo sapiens], AMPK	94557301	62.3	1.098	4	**1.691**	34	**1.515**	4	0.87	**1.660**	4	**1.589**	4	1.18	4.88	9.68	4	1	1078.04	8.51	28	14	524.18	5.79	4	1
programmed cell death 4 isoform 2 [Homo sapiens], PDCD4	57162254	51.5	1.119	8	**1.661**	8	**1.647**	8	0.82	**1.633**	8	**1.655**	8	0.98	5.48	10.70	10	3	358.24	10.70	7	3	120.81	10.70	6	3
MSH homeobox protein 1 [Homo sapiens], MSX1	45595674	32.9	1.040	3	**1.652**	3	**1.824**	3	0.84	**1.626**	3	**1.634**	3	0.94	7.42	10.65	6	2	177.59	10.65	3	2	122.64	10.65	3	2
sestrin 2 [Homo sapiens], SESN2	119628108	55.8	1.046	10	**1.646**	11	**1.626**	11	0.81	**1.633**	11	**1.666**	11	1.12	7.97	15.35	16	3	228.29	11.75	6	4	128.63	11.66	4	3
homeodomain interacting protein kinase 2 [Homo sapiens], HIPK2	164420685	122.8	1.059	16	**1.643**	16	**1.603**	16	0.84	**1.623**	16	**1.627**	16	1.18	7.92	15.50	16	12	268.25	15.35	9	3	158.16	15.35	7	3
programmed cell death protein 6 [Homo sapiens], PDCD6	7019485	21.7	1.160	5	**1.602**	5	**1.601**	5	0.89	**1.512**	5	**1.603**	5	0.83	5.29	23.94	8	2	194.50	23.94	3	2	88.90	23.94	5	2
cyclin kinase inhibitor 1B [Homo sapiens], CDKN1B	48146915	21.8	1.180	4	**1.541**	4	**1.536**	4	1.20	**1.509**	4	**1.673**	4	0.90	5.55	14.80	9	4	187.64	12.50	4	3	108.47	14.80	5	4
serine/threonine-protein kinase Chk1 [Homo sapiens], CHK1	166295196	52.7	1.067	18	**1.530**	18	**1.616**	18	0.95	**1.659**	18	**1.584**	18	1.05	5.88	20.63	22	9	558.50	15.13	15	6	301.19	16.31	17	8
caspase recruitment domain containing pro-apoptotic protein [Homo sapiens], CARP	13376431	47.1	1.018	1	**1.497**	1	**1.578**	1	0.88	**1.485**	1	**1.936**	1	1.08	5.76	1.86	2	1	62.89	1.86	1	1	46.48	1.86	1	1
activating transcription factor 3 [Homo sapiens], ATF3	55665721	19.8	1.089	3	**1.492**	3	**1.439**	3	1.12	**1.418**	3	**1.571**	3	0.95	4.81	6.56	5	1	84.39	6.56	2	1	126.03	6.56	3	1
proliferating cell nuclear antigen [Homo sapiens], PCNA	49456555	29.6	1.161	1	**1.480**	1	**1.403**	1	0.98	**1.355**	1	**1.500**	1	0.92	6.33	3.49	3	2	67.48	3.49	2	2	29.91	1.96	1	1
CREB binding protein [Homo sapiens], CREBBP	194358893	7.5	1.093	1	**1.473**	1	**1.411**	1	1.15	**1.401**	1	**1.471**	1	0.85	10.36	10.14	1	1	19.34	5.79	1	1	46.01	10.14	1	1
histone H2AX gamma [Homo sapiens], H2AFX	4504253	15.9	1.160	1	**1.470**	1	**1.403**	1	0.97	**1.426**	1	**1.464**	1	0.92	6.33	4.19	3	2	67.48	4.11	2	2	29.91	1.96	1	1
growth arrest and DNA-damage-inducible, gamma [Homo sapiens], GADD45G	55663260	17.5	1.166	1	**1.469**	1	**1.503**	1	0.98	**1.422**	1	**1.430**	1	0.94	6.39	5.12	3	2	74.48	3.89	2	1	47.84	3.15	1	1
ataxia telangiectasia mutated kinase [Homo sapiens], ATM	2304971	321.5	1.062	4	**1.466**	4	**1.341**	4	0.83	**1.406**	4	**1.417**	4	0.80	9.20	9.90	6	2	57.15	9.90	2	2	65.47	9.90	4	2
excision repair cross-complementing repair deficiency, complementation group 1 [Homo sapiens], ERCC1	42544169	36.4	1.019	9	**1.465**	9	**1.360**	9	1.08	**1.401**	9	**1.407**	9	1.16	5.33	28.05	10	4	486.50	28.05	9	4	236.61	28.05	9	4
E3 ubiquitin -protein ligase Mdm2 [Homo sapiens], MDM2	89993689	54.9	0.494	2	**1.461**	2	**1.419**	2	1.10	**1.508**	2	**1.544**	2	0.93	4.51	3.99	14	2	319.06	3.99	8	2	176.38	1.91	6	1
mitogen-activated protein kinase 8 isoform JNK1 alpha2 [Homo sapiens], MAPK8	20986523	46.5	1.093	18	**1.444**	18	**1.358**	18	1.15	**1.327**	18	**1.409**	18	1.12	5.10	11.40	19	6	642.27	10.31	14	5	207.14	11.40	15	6
cyclin-dependent kinase 2 isoform 1[Homo sapiens], CDK2	16936528	33.5	1.063	1	**1.432**	1	**1.462**	1	0.94	**1.414**	1	**1.458**	1	0.90	9.85	7.75	1	1	32.53	14.45	1	1	44.48	7.75	1	1
methyl-CpG-binding protein 2 isoform 1 [Homo sapiens], MECP2	4826830	53.4	1.085	4	**1.419**	4	**1.673**	4	0.97	**1.511**	4	**1.909**	4	1.10	4.98	11.16	4	4	542.97	9.13	15	6	436.87	11.16	20	8
rho GDP-dissociation inhibitor 1 [Homo sapiens], ARHGDIA	297374782	23.4	1.028	10	**1.413**	10	**1.486**	10	0.91	**1.465**	10	**1.474**	10	1.00	6.62	22.65	10	9	504.31	18.58	11	7	69.60	14.50	5	5
death-associated protein kinase 1 [Homo sapiens], DAPK1	55662761	165.3	1.029	7	**1.390**	7	**1.348**	7	0.86	**1.315**	7	**1.409**	7	1.03	7.52	12.98	7	3	165.66	12.98	5	3	114.98	12.98	7	3
apoptosis regulator BAX isoform alpha [Homo sapiens], BAX	20631958	21.5	1.185	6	**1.365**	6	**1.360**	6	0.81	**1.533**	11	**1.666**	6	1.12	7.97	15.35	6	3	268.25	15.35	6	3	158.16	15.35	4	3
TP53 binding protein 2 [Homo sapiens], TP53BP2	211828528	120.6	1.078	29	**1.356**	31	**1.348**	26	1.00	**1.508**	26	**1.406**	31	0.95	6.64	38.03	26	9	1926.45	38.03	34	9	949.07	20.74	16	2
caspase 3, apoptosis-related cysteine peptidase [Homo sapiens], CASP3	14790119	31.9	1.089	3	**1.338**	3	**1.204**	3	0.83	**1.218**	3	**1.280**	3	1.02	7.01	49.03	9	8	3911.15	38.41	15	13	1804.71	40.34	8	5
double-strand break repair protein MRE11A isoform 1 [Homo sapiens], MRE11	5031923	78.8	1.044	4	**1.327**	4	**1.346**	4	0.85	**1.244**	4	**1.404**	4	1.15	8.54	13.43	8	5	367.22	11.51	11	4	116.66	8.87	7	4
histone-arginine methyltransferase [Homo sapiens] CARM1	40288288	66.5	1.135	4	**1.322**	4	**1.348**	4	0.81	**1.236**	4	**1.442**	4	1.15	8.35	13.43	6	5	367.22	11.51	11	4	116.66	8.87	7	4
apoptotic protease-activating factor 1 isoform a [Homo sapiens], APAF1	7108333	129.3	1.098	34	**1.317**	34	**1.515**	34	0.87	**1.660**	34	**1.589**	34	1.18	4.88	9.68	32	16	1078.04	8.51	28	14	524.18	5.79	24	10
serine/threonine-protein kinase LATS2 [Homo sapiens], LATS2	126507091	112.9	1.029	5	**1.316**	5	**1.370**	5	0.85	**1.316**	5	**1.404**	5	0.90	5.64	5.48	8	3	425.91	5.48	5	3	64.34	5.48	3	3
apoptosis-associated nuclear protein; pleckstrin like [Homo sapiens], PHLDA1	123094031	34.2	1.044	6	**1.313**	6	**1.317**	6	1.10	**1.327**	14	**1.376**	14	0.93	6.07	16.97	14	8	570.77	15.51	21	7	462.84	16.97	29	8
transcriptional repressor CTCF isoform 1 [Homo sapiens], CTCF	5729790	80.8	1.048	13	**1.303**	14	**1.319**	14	1.97	**1.302**	14	**1.318**	14	0.95	6.07	12.45	12	7	354.67	11.45	24	9	543.36	19.81	11	8
caspase 7, apoptosis-related cysteine peptidase [Homo sapiens], CASP7	55962068	25.3	1.160	5	**1.302**	5	**1.306**	5	0.89	**1.512**	5	**1.333**	5	0.83	5.29	23.94	8	2	194.50	23.94	3	2	88.90	23.94	5	2
ATR interacting protein [Homo sapiens], ATRIP	21040411	78.4	1.087	4	**1.297**	4	**1.295**	4	0.84	**1.522**	4	**1.320**	4	1.15	7.42	3.16	4	2	114.87	3.16	2	2	38.31	1.33	2	1
TP53 regulated kinase [Homo sapiens], PRPK	41327715	28.6	1.129	4	**1.291**	4	**1.220**	4	1.07	**1.384**	4	**1.373**	4	0.83	9.07	25.60	7	5	1051.99	25.60	33	5	848.37	24.64	7	4
tumor protein p63, [Homo sapiens], TP63	169234661	68.1	1.146	1	**1.286**	1	**1.289**	1	1.03	**1.522**	1	**1.322**	1	0.88	5.24	17.35	4	3	403.05	13.27	6	2	293.93	17.35	7	3
caspase 9, apoptosis-related cysteine peptidase [Homo sapiens], CASP9	55960247	29.3	1.096	3	**1.282**	92	**1.254**	3	0.95	**1.202**	3	**1.207**	3	1.13	4.91	20.80	3	3	2874.58	17.79	65	25	1938.48	15.76	78	23
insulin-like growth factor binding protein 6 [Homo sapiens], IGFBP6	49456539	26.6	1.123	13	**1.272**	13	**1.264**	13	0.93	**1.486**	13	**1.589**	13	0.94	7.17	10.86	5	4	444.12	10.58	11	3	220.09	10.86	10	4
Peptidyl prolyl cis/trans isomerase, NIMA-interacting 1 [Homo sapiens], PIN1	1332710	19.8	1.089	5	**1.269**	5	**1.237**	5	0.85	**1.262**	5	**1.304**	5	0.92	4.43	4.41	4	3	325.10	4.33	5	3	51.42	4.35	3	3
death-associated protein 6 [Homo sapiens], DAXX	168985747	19.9	1.014	2	**1.266**	2	**1.156**	2	1.18	**1.150**	2	**1.254**	2	0.92	8.12	5.86	3	2	117.91	5.86	2	2	58.18	2.23	1	1
Krueppel-like factor 6 isoform C [Homo sapiens], KLF6	236460752	27.1	1.089	5	**1.264**	5	**1.370**	5	0.90	**1.216**	5	**1.404**	5	0.81	5.64	5.48	5	3	425.91	5.48	5	3	64.34	5.48	3	3
apoptosis-inducing factor 1, mitochondrial isoform 2 [Homo sapiens], AIFM2	22202629	66.3	1.025	28	**1.263**	28	**1.270**	28	1.18	**1.252**	28	**1.258**	29	0.90	8.94	24.30	20	11	853.15	19.38	27	9	345.91	20.03	23	9
dual specificity protein phosphatase 1 [Homo sapiens], DUSP1	4758204	42.5	1.089	5	**1.260**	5	**1.235**	5	0.82	**1.242**	5	**1.304**	5	0.83	5.24	5.18	5	3	421.10	5.48	5	3	64.42	5.38	3	3

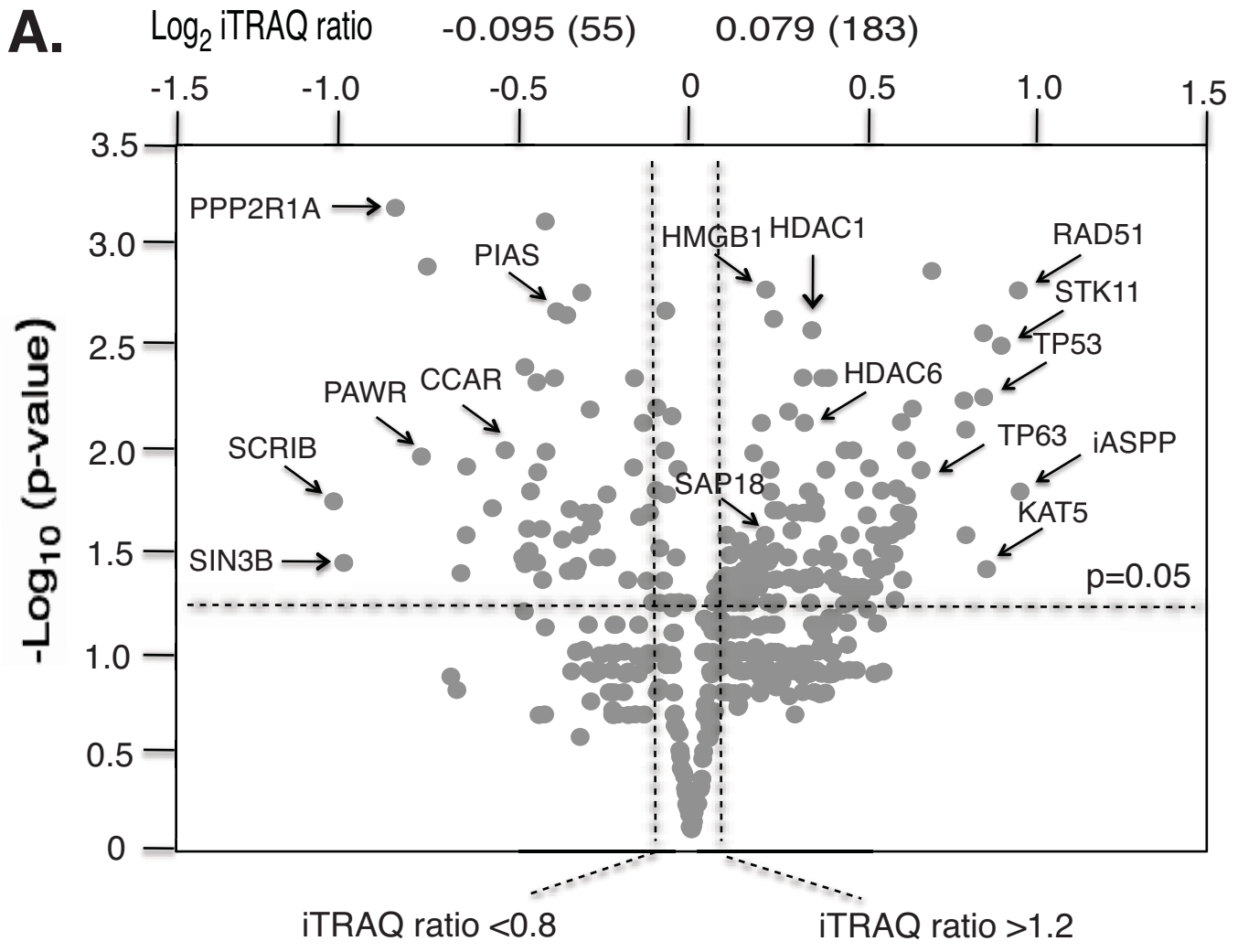
apoptosis regulator Bcl-2 alpha isoform [Homo sapiens], BCL2	72198189	27.1	1.065	2	**1.257**	2	**1.239**	2	1.05	**1.269**	2	**1.319**	2	1.19	6.62	1.76	3	1	58.88	1.76	1	1	47.17	1.76	2	1
Y-box binding protein 1 [Homo sapiens], YBX1	116283293	20.6	1.099	2	**1.251**	2	**1.224**	2	0.81	**1.235**	2	**1.299**	2	0.99	5.96	1.73	3	1	38.38	1.73	1	1	102.35	1.73	2	1
mitochondrial inner membrane protein [Homo sapiens], IMMT	48145703	81.1	1.082	3	**1.249**	3	**1.216**	3	0.89	**1.373**	3	**1.388**	3	0.99	6.07	4.32	5	3	135.83	4.32	3	3	62.10	3.19	2	2
poly ADP ribose polymerase 1 [Homo sapiens], PARP1	116283598	26.1	1.194	8	**1.247**	8	**1.214**	8	1.05	**1.394**	8	**1.217**	8	1.15	7.97	39.53	7	4	241.32	22.09	6	2	78.26	39.53	7	4
beclin 1 [Homo sapiens], BECN1	4502395	52.5	1.186	1	**1.236**	1	**1.268**	1	0.97	**1.272**	1	**1.271**	1	1.14	9.54	12.70	2	1	48.09	12.70	1	1	31.47	12.70	1	1
mediator of DNA-damage checkpoint 1 [Homo sapiens], MDC1	168985671	33.1	1.005	7	**1.235**	7	**1.213**	7	0.98	**1.435**	7	**1.263**	7	1.14	6.57	42.13	7	3	478.51	37.50	15	6	331.52	18.98	7	4
p53 and DNA damage regulated 1 [Homo sapiens], PDRG1	38197489	13.7	1.086	8	**1.223**	8	**1.213**	8	1.15	**1.245**	8	**1.276**	8	0.85	9.31	5.23	10	4	177.53	5.23	6	4	77.94	2.48	4	2
Mdm4, p53 binding protein homolog [Homo sapiens], MDM4	55960021	21.8	1.044	6	**1.222**	7	**1.212**	7	0.89	**1.235**	37	**1.552**	7	0.92	7.09	34.79	6	2	2006.73	34.79	37	12	578.75	30.77	5	1
ataxin-10 isoform 1 [Homo sapiens], ATXN10	169145012	21.5	1.092	25	**1.216**	25	**1.212**	25	0.85	**1.230**	25	**1.417**	25	1.13	5.25	9.89	29	5	622.75	9.89	18	5	414.31	8.63	21	4
CDK5 and ABL1 enzyme substrate 1 isoform 1 [Homo sapiens], CABLES1	24308408	40.6	1.097	1	**1.215**	1	**1.269**	1	1.15	**1.293**	1	**1.274**	1	1.11	6.13	3.15	2	1	66.61	3.15	1	1	47.84	3.15	1	1
DNA damage-binding protein 2 [Homo sapiens], DDB2	4557515	46.1	1.093	27	**1.211**	31	**1.248**	31	0.81	**1.253**	31	**1.209**	31	0.82	7.03	51.92	30	20	5402.07	51.92	78	20	1829.81	49.13	22	18
UV excision repair protein RAD23 homolog B [Homo sapiens], RAD23	4506387	43.1	1.097	17	**1.209**	17	**1.210**	17	0.80	**1.226**	17	**1.333**	17	0.92	4.84	20.54	17	8	408.33	16.38	11	6	294.04	16.63	16	6
ATP-binding cassette, sub-family B (MDR/TAP), member 1 [Homo sapiens], ABCB1	119597349	31.6	1.150	6	**1.207**	6	**1.209**	6	0.86	**1.272**	6	**1.070**	6	1.19	5.19	17.05	8	5	200.39	17.05	5	5	104.75	6.53	3	2
nuclear mitotic apparatus protein 1 [Homo sapiens], NUMA1	31455194	170.6	1.087	1	**1.205**	1	**1.208**	1	0.97	**1.393**	1	**1.351**	1	1.03	7.17	5.76	2	2	68.19	5.76	2	2	39.89	8.76	2	2
Ras association (RalGDS/AF-6) and pleckstrin homology domains 1 [Homo sapiens], RAPH1	47132519	132.2	1.097	8	**1.204**	8	**1.207**	8	0.81	**1.386**	8	**1.293**	8	1.07	7.24	7.50	8	3	394.05	5.42	8	2	271.10	7.50	10	3
peroxisome proliferator-activated receptor gamma, coactivator 1 alpha [Homo sapiens], PPARGC1A	160431604	86.9	1.031	8	**1.203**	8	**1.205**	8	0.92	**1.219**	8	**1.153**	8	1.06	7.44	17.07	6	5	373.55	17.07	8	5	181.89	13.28	8	4
growth-arrest specific 7, isoform b [Homo sapiens], GAS7	41406078	44.3	1.110	11	**1.202**	11	**1.205**	1	1.01	**1.586**	11	**1.380**	11	1.15	5.03	20.00	9	4	403.25	20.00	14	4	299.21	19.09	10	3
ATP-binding cassette sub-family B member 7, mitochondrial [Homo sapiens], ABCB7	57209191	82.7	1.052	7	**1.201**	7	**1.204**	7	1.14	**1.250**	7	**1.207**	7	0.98	9.33	12.48	7	6	295.35	11.42	7	5	225.82	12.48	8	6
serine/threonine-protein kinase [Homo sapiens], DCLK1	4758128	81.0	0.975	6	**0.799**	6	**0.805**	6	0.90	**0.805**	6	**0.752**	6	1.00	8.66	3.02	6	2	221.79	1.51	5	1	171.19	3.02	7	2
hypoxia-inducible factor 1-alpha isoform 1 [Homo sapiens], HIF1A	4504385	90.9	0.984	1	**0.797**	1	**0.708**	1	0.90	**0.709**	1	**0.936**	1	1.08	5.76	1.86	2	1	62.89	1.86	1	1	46.48	1.86	1	1
C-terminal-binding protein 1 isoform 1 [Homo sapiens], CTBP1	4557497	48.5	1.205	2	**0.781**	2	**0.678**	2	1.15	**0.514**	2	**0.611**	2	0.84	5.41	8.82	4	2	147.51	8.82	2	2	118.70	8.82	2	2
Clock [Homo sapiens], CLOCK	2275619	92.3	0.916	29	**0.781**	29	**0.725**	29	0.80	**0.713**	29	**0.734**	29	0.91	4.93	47.31	28	5	535.89	47.31	15	5	315.77	47.31	23	5
X-linked inhibitor of apoptosis [Homo sapiens], XIAP	8744934	59.8	0.953	6	**0.772**	6	**0.780**	6	0.90	**0.746**	6	**0.745**	6	1.00	8.66	3.02	6	2	221.79	1.51	5	1	171.19	3.02	7	2
ribosomal protein L11 isoform 1 [Homo sapiens], RPL11	15431290	29.5	0.981	17	**0.766**	17	**0.715**	17	1.07	**0.432**	17	**0.476**	17	0.91	8.62	21.19	18	12	817.17	18.22	19	10	552.85	18.37	19	10
RAC-alpha serine/threonine-protein kinase [Homo sapiens], AKT1	62241015	52.3	0.995	4	**0.762**	4	**0.691**	4	0.92	**0.707**	4	**0.685**	4	1.12	5.31	25.13	5	5	123.50	13.09	2	2	51.41	12.04	3	3
CDK5 regulatory subunit-associated protein 1 [Homo sapiens], CDK5RAP1	56205141	65.1	0.921	1	**0.747**	1	**0.794**	1	0.88	**0.723**	1	**0.811**	1	0.90	7.46	1.73	2	1	40.04	1.73	1	1	47.19	1.73	1	1
Retinoblastoma binding protein 8 [Homo sapiens], RBBP8	42718015	97.9	0.915	26	**0.742**	26	**0.759**	26	1.13	**0.727**	26	**0.733**	26	0.99	5.31	19.34	48	11	707.90	17.89	21	10	579.00	16.05	27	9
DNA topoisomerase 2-alpha [Homo sapiens], TOP2A	19913406	174.3	0.934	2	**0.741**	2	**0.755**	2	0.98	**0.743**	2	**0.718**	2	1.03	8.72	3.33	7	4	143.21	3.33	4	4	47.44	2.61	3	3
cyclin-dependent kinase 2 associated protein 1 [Homo sapiens], CDK2AP1	4758188	12.8	0.910	4	**0.735**	4	**0.676**	4	1.09	**0.772**	4	**0.852**	4	0.91	7.46	4.33	6	2	76.71	4.33	3	2	77.91	2.09	3	1
X-ray repair complementing defective repair 3 [Homo sapiens], XRCC1	48145573	71.2	0.909	16	**0.734**	15	**0.680**	15	1.08	**0.715**	16	**0.718**	16	0.99	5.66	17.84	18	11	742.53	14.71	10	8	308.80	15.10	28	13
relA-associated inhibitor [Homo sapiens], iASPP	63003907	90.9	0.929	21	**0.732**	25	**0.672**	25	1.08	**0.749**	26	**0.776**	26	0.98	5.58	19.67	28	14	1042.57	19.79	20	10	618.58	25.10	25	15
serine/threonine-protein kinase PLK2 [Homo sapiens] PLK2	93004081	76.5	0.919	18	**0.731**	17	**0.678**	17	1.08	**0.714**	17	**0.708**	17	0.95	5.17	18.14	21	12	912.66	15.11	17	9	413.03	19.30	29	11
BCL2-associated athanogene [Homo sapiens], BAG	45331268	18.5	0.915	1	**0.721**	1	**0.681**	1	0.85	**0.605**	1	**0.736**	1	1.13	8.98	0.49	1	1	43.33	12.49	1	1	26.16	11.09	6	4
XIAP-associated factor 1 isoform 1 [Homo sapiens], NUTLIN2	40288191	33.2	0.907	1	**0.720**	1	**0.689**	1	1.08	**0.717**	1	**0.782**	1	1.15	5.74	4.43	1	1	9.98	9.09	1	1	43.40	4.43	1	1
nuclear factor NF-kappa-B p105 subunit isoform 1 [Homo sapiens], NFKB1	34577122	111.0	0.909	4	**0.718**	4	**0.727**	4	0.97	**0.711**	4	**0.793**	4	1.10	4.98	11.16	5	8	542.97	9.13	15	6	436.87	11.16	6	8
nucleus accumbens-associated protein 1 [Homo sapiens], NAC1	16418383	57.6	0.905	18	**0.717**	57	**0.680**	17	1.18	**0.763**	17	**0.715**	17	0.83	8.84	32.74	14	16	2217.01	29.89	48	14	1122.87	26.77	16	13
double-strand-break repair protein rad21 homolog [Homo sapiens], RAD21	5453994	71.6	0.911	1	**0.710**	1	**0.730**	1	1.09	**0.708**	1	**0.722**	1	0.98	4.65	1.43	2	1	44.73	1.43	1	1	40.25	1.43	1	1
serine-threonine kinase ULK1 [Homo sapiens], ULK1	4507831	110.2	0.885	41	**0.706**	43	**0.876**	43	1.18	**0.702**	43	**0.621**	43	0.88	5.03	41.24	41	12	2046.84	39.86	42	11	1440.49	41.24	39	12
cytochrome b5 type B [Homo sapiens], CYB5B	37514836	17.3	0.927	6	**0.705**	6	**0.663**	6	1.13	**0.770**	6	**0.844**	6	0.91	5.14	54.08	6	4	294.22	54.08	5	4	155.05	54.08	6	4
mitochondrial import receptor subunit TOM70 [Homo sapiens], TOM70	54607135	67.4	0.931	8	**0.689**	8	**0.897**	8	1.09	**0.765**	8	**0.886**	8	0.86	7.12	7.07	13	4	302.41	7.07	7	4	167.16	5.92	6	3
TP53 regulated inhibitor of apoptosis 1 [Homo sapiens], TRIAP1	7705467	8.0	0.929	3	**0.687**	3	**0.650**	3	0.86	**0.643**	3	**0.640**	3	1.02	6.80	9.15	5	3	123.30	9.15	3	3	71.99	6.18	2	2
aurora kinase A [Homo sapiens], AURKA	126541215	16.8	0.901	44	**0.683**	44	**0.726**	44	0.92	**0.705**	44	**0.719**	44	0.94	8.40	19.37	49	11	901.04	14.96	25	8	669.75	19.37	44	11
heat shock protein 60 kDa protein 1, mitochondrial [Homo sapiens], HSPD1	189502784	62.1	0.905	58	**0.681**	58	**0.731**	58	1.11	**0.630**	58	**0.619**	58	0.97	8.21	25.43	91	16	1387.49	19.74	38	11	933.72	24.01	53	15
siah binding protein 1 [Homo sapiens], SIAH	1809248	60.3	0.909	4	**0.679**	4	**0.734**	4	0.97	**0.661**	4	**0.691**	4	1.10	4.98	11.16	5	8	542.97	9.13	15	6	436.87	11.16	20	8
p53 apoptosis effector related to PMP-22 [Homo sapiens], PERP	31377722	21.1	0.943	1	**0.678**	1	**0.782**	1	0.90	**0.661**	1	**0.694**	1	1.08	5.76	1.86	2	1	62.89	1.86	1	1	46.48	1.86	1	1
AKT2 v-akt murine thymoma viral oncogene homolog 2 [Homo sapiens], AKT2	116283837	38.7	0.923	2	**0.663**	2	**0.614**	2	1.00	**0.622**	2	**0.631**	2	0.93	6.37	6.24	6	3	111.57	6.24	3	3	46.80	6.24	3	3
DNA-damage regulated autophagy modulator 1 [Homo sapiens], DRAM1	110825978	27.7	0.904	11	**0.658**	11	**0.826**	11	1.16	**0.767**	11	**0.810**	11	0.95	5.41	18.27	9	5	289.70	12.82	9	4	185.50	15.06	10	4
inhibitor of nuclear factor kappa-B kinase subunit beta isoform 1 [Homo sapiens], IKKB	41352712	83.0	0.991	4	**0.657**	4	**0.629**	4	0.91	**0.608**	4	**0.628**	4	0.91	8.60	3.06	7	3	186.38	4.46	6	3	94.44	3.06	4	3
alpha-soluble NSF attachment protein [Homo sapiens], NAPA	47933379	35.1	1.403	1	**0.656**	1	**0.576**	1	1.12	**0.685**	1	**0.647**	1	1.07	9.10	5.48	4	1	50.50	5.48	2	1	37.03	5.48	2	1
cell division control protein 42 homolog isoform 1 [Homo sapiens], CDC42	4757952	26.4	0.979	8	**0.655**	8	**0.651**	8	0.83	**0.698**	8	**0.682**	8	1.17	8.81	19.18	16	6	426.52	19.18	8	6	177.91	19.18	8	6
UV-radiation resistance associated protein [Homo sapiens], UVRAG	21687212	71.4	0.986	27	**0.654**	27	**0.658**	27	0.80	**0.675**	27	**0.619**	27	0.90	7.20	23.05	49	10	848.90	20.21	23	8	420.62	13.30	26	7
apoptosis signal-regulating kinase [Homo sapiens], ASK1/MAP3K5	66391167	153.3	1.199	41	**0.619**	41	**0.607**	41	1.05	**0.671**	41	**0.602**	41	0.97	4.87	23.47	77	17	1480.59	21.23	39	15	737.40	22.52	38	16
histone deacetylase 7A [Homo sapiens], HDAC7A	169234807	107.9	0.988	40	**0.611**	40	**0.638**	40	0.92	**0.597**	40	**0.588**	40	1.17	9.38	15.32	72	16	1292.39	13.47	36	13	703.07	13.20	36	13
dual specificy protein phosphatase 1 [Homo sapiens], MKP1	4758204	65.1	0.538	1	**0.576**	1	**0.508**	1	1.13	**0.515**	1	**0.576**	1	0.89	11.41	11.72	2	1	78.53	11.72	1	1	48.48	11.72	1	1
10 kDa heat shock protein, mitochondrial [Homo sapiens], HSPE1	4504523	13.3	1.243	2	**0.568**	2	**0.585**	2	0.97	**0.516**	2	**0.437**	2	1.18	6.33	16.56	52	6	764.68	16.56	24	6	660.20	14.68	8	5
high mobility protein HMG-I/HMG-Y isoform a [Homo sapiens], HMGA1	22208971	11.8	0.755	2	**0.543**	2	**0.525**	2	1.03	**0.499**	2	**0.506**	2	0.99	6.80	5.94	4	2	108.46	5.94	2	2	46.87	5.94	2	2
Cbp/p300-interacting transactivator 1 [Homo sapiens], CITED1	222136692	24.1	1.137	8	**0.446**	8	**0.480**	8	0.93	**0.503**	8	**0.527**	8	0.95	8.22	13.24	13	7	243.76	9.00	5	5	116.16	13.24	8	7
apoptotic chromatin condensation inducer 1 [Homo sapiens], ACIN1	187954619	241.3	1.113	38	**0.221**	38	**0.285**	37	1.10	**0.498**	38	**0.486**	37	1.03	5.08	26.28	61	8	995.78	22.87	28	6	686.19	26.28	33	8
sequestosome 1 [Homo sapiens], SQSTM1	4505571	60.0	1.217	4	**0.206**	4	**0.210**	4	1.04	**0.295**	4	**0.273**	4	1.00	8.97	37.50	8	2	196.28	37.50	4	2	96.27	37.50	4	2

Table SVI. DeltaNp63alpha-interacting proteins in sensitive SCC (wild type p63) cells upon cisplatin exposure

Description	Accession	MW [kDa]	A5: 114/113	114/113 C	A5: 115/113	115/113 C	A5: 116/113	116/113 C	115/116	A5: 117/113	117/113 C	A5: 118/113	118/113 C	117/118	calc. pI	Coverage	# PSMs	# Peptide	Score A3	Coverage A3	PSM A3	Peptides	Score A4	Coverage A4	PSM A4	Peptides A4
tumor protein p63 [Homo sapiens], TP63	169234657	67.9	0.985	50	**3.286**	51	**3.744**	51	0.87	**3.841**	51	**3.895**	51	0.99	5.59	53.03	103	7	1528.96	53.03	46	6	1207.26	53.03	57	6
Sin3A-associated protein,18kDa [Homo sapiens], SAP18	21410831	20.5	0.907	4	**3.179**	4	**3.161**	4	0.90	**3.279**	4	**3.179**	4	1.03	5.49	29.42	4	2	1176.95	29.42	4	2	870.59	22.60	4	3
Sin3 homolog A, transcription regulator [Homo sapiens], SIN3A	187953437	140.2	0.885	41	**3.164**	43	**3.188**	43	1.18	**3.170**	43	**2.679**	43	0.88	5.03	41.24	111	12	2046.84	39.86	42	11	1440.49	41.24	69	12
ataxia telangiectasia mutated kinase [Homo sapiens], ATM	2304971	335.9	0.871	7	**3.146**	7	**3.178**	7	0.98	**3.140**	7	**3.015**	7	1.04	4.89	63.15	1084	25	20934.27	63.15	56	25	11385.00	55.06	68	21
PRP40 pre-mRNA processing factor 40 homolog B [Homo sapiens], PRPF40B	72534686	96.6	0.991	2	**2.951**	2	**2.796**	2	0.81	**2.895**	2	**2.912**	2	0.99	5.96	1.73	3	1	38.38	1.73	1	1	102.35	1.73	2	1
DNA (cytosine-5)-methyltransferase 1 isoform a [Homo sapiens], DNMT1	195927037	179.0	1.095	13	**2.805**	13	**2.935**	13	0.81	**2.833**	13	**2.855**	13	1.11	6.99	15.71	35	2	491.42	15.71	16	2	397.99	15.71	19	2
ribosomal protein S6 kinase beta-1 [Homo sapiens], RPS6KB1	4506737	59.4	0.979	34	**2.717**	34	**2.515**	34	0.87	**2.660**	34	**2.589**	34	1.18	4.88	9.68	52	16	1078.04	8.51	28	14	524.18	5.79	24	10
GRB2-associated protein 2 isoform 2 [Homo sapiens], GAB2	6912460	73.5	1.062	4	**2.699**	4	**2.414**	4	0.83	**2.541**	4	**2.677**	4	0.80	9.20	9.90	6	2	57.15	9.90	2	2	65.47	9.90	4	2
nuclear transcription factor Y, beta [Homo sapiens], NFYB	5453780	25.8	1.046	10	**2.646**	11	**2.026**	11	0.81	**2.533**	11	**2.267**	11	1.12	7.97	15.35	16	3	268.25	15.35	9	3	158.16	15.35	7	3
cyclin-dependent kinase 2 isoform 1 [Homo sapiens], CDK2	16936528	33.1	0.933	7	**2.579**	7	**2.185**	7	0.81	**2.530**	7	**2.493**	7	0.82	7.03	51.92	22	10	5402.07	51.92	11	8	1829.81	49.13	10	8
stratifin [Homo sapiens], SFN	49456807	29.6	0.989	11	**2.338**	13	**2.260**	13	0.83	**2.518**	13	**2.480**	13	1.02	7.01	49.03	90	18	3911.15	38.41	105	13	1804.71	40.34	85	15
nuclear factir NF-kappa-B p105 subunit isoform 1 [Homo sapiens], NFKB1	34577122	111.7	1.160	5	**2.302**	5	**2.181**	5	0.89	**2.512**	5	**2.033**	5	0.83	5.29	23.94	8	2	194.50	23.94	3	2	88.90	23.94	5	2
autophagy/beclin-1 regulator 1 [Homo sapiens], AMBRA1	50843827	132.4	0.963	90	**2.186**	92	**2.254**	92	0.95	**2.302**	91	**2.207**	92	1.13	4.91	20.80	143	30	2874.58	17.79	65	25	1938.48	15.76	78	23
CREB-regulated transcription coactivator 1 isoform 1 [Homo sapiens], CRTC1	148596965	67.5	0.753	6	**2.171**	6	**2.078**	6	0.90	**2.463**	6	**2.452**	6	1.00	8.66	3.02	12	2	221.79	1.51	5	1	171.19	3.02	7	2
homedomain interacting protein kinase 2 [Homo sapiens], HIPK2	3164420685	122.9	0.993	9	**2.153**	9	**2.109**	9	1.05	**2.449**	9	**2.492**	9	0.98	9.39	21.39	17	6	338.81	15.56	7	4	200.46	16.39	10	5
DNA damage-inducible transcript 3 [Homo sapiens], DDIT3	304282231	20.3	0.974	2	**2.107**	2	**1.971**	2	1.00	**2.142**	2	**2.168**	2	0.91	4.92	1.25	20	3	285.28	1.00	9	2	198.62	1.25	11	3
REST corepressor 1 [Homo sapiens], RCOR1	119602199	54.4	1.019	9	**2.046**	9	**1.950**	9	1.08	**2.010**	9	**2.066**	9	1.16	5.33	28.05	18	4	486.50	28.05	9	4	236.61	28.05	9	4
E2F transcription factor [Homo sapiens], E2F1	12669911	48.6	1.014	5	**1.991**	5	**2.075**	5	0.89	**2.081**	5	**2.011**	5	0.99	5.27	15.69	8	4	165.73	15.69	4	4	122.74	11.70	4	3
splicing factor 3A subunit 2 [Homo sapiens], SF3A2	21361376	61.8	1.144	4	**1.873**	4	**1.758**	4	0.85	**1.944**	4	**1.948**	4	1.15	8.54	13.43	18	5	367.22	11.51	11	4	116.66	8.87	7	4
serine/threonine protein kinase SRPK2 isoform a [Homo sapiens], SRPK2	33188449	76.9	0.968	1	**1.780**	1	**1.825**	1	1.15	**1.724**	1	**1.774**	1	1.11	6.13	3.15	2	1	66.61	3.15	1	1	47.84	3.15	1	1
RNA-binind protein with serine-rich domain 1 [Homo sapiens], RNPS1	6857826	33.7	1.124	8	**1.729**	9	**1.696**	9	0.86	**1.736**	9	**1.755**	9	1.07	6.90	74.30	16	13	3619.91	63.45	7	2	1932.29	69.08	8	2
histone-arginine methyltransferase [Homo sapiens], CARM1	40288288	67.2	1.040	2	**1.722**	3	**1.676**	3	0.90	**1.723**	3	**1.881**	3	1.19	7.40	9.62	5	2	107.28	9.62	2	2	80.01	9.62	3	2
copper transport protein ATOX1 [Homo sapiens], ATOX1	4757804	8.4	1.018	1	**1.713**	1	**1.686**	1	0.97	**1.648**	1	**1.742**	1	1.00	6.62	22.65	1	1	504.31	18.58	1	1	69.60	14.50	5	5
apoptotic chromatin condensation inducer 1 isoform 1 [Homo sapiens], ACIN1	187954619	240.8	0.895	5	**1.691**	5	**1.701**	5	0.85	**1.617**	5	**1.604**	5	0.90	5.64	5.48	8	3	425.91	5.48	5	3	64.34	5.48	3	3
bcl-2-associated transcription factor 1 isoform 1 [Homo sapiens], BCLAF1	7661958	103.5	1.073	8	**1.577**	8	**1.547**	8	0.82	**1.535**	8	**1.468**	8	0.97	5.80	21.32	13	6	248.79	21.32	7	6	122.98	17.72	6	4
serine/arginine-rich splicing factor 2 [Homo sapiens], SRSF2	306482646	24.8	1.075	6	**1.572**	6	**1.508**	6	0.90	**1.463**	6	**1.452**	6	1.00	8.66	3.02	12	2	221.79	1.51	5	1	171.19	3.02	7	2
DAB2 interacting protein [Homo sapiens], DAB2IP	94967023	123.3	1.188	11	**1.450**	11	**1.410**	11	0.98	**1.480**	11	**1.469**	11	1.07	8.69	8.23	15	5	249.57	8.23	7	5	140.17	6.15	8	4
ADP-ribosylation factor 1 [Homo sapiens], ARF1	56204828	20.7	1.093	4	**1.427**	4	**1.412**	4	1.05	**1.464**	4	**1.395**	4	1.11	6.80	58.56	5	2	2500.40	57.46	7	4	1515.64	58.56	7	3
growth arrest and DNA-damage-inducible, gamma [Homo sapiens], GADD45G	55663260	17.5	1.061	1	**1.395**	1	**1.393**	1	0.98	**1.355**	1	**1.410**	1	0.92	6.33	3.49	3	2	67.48	3.49	2	2	28.90	6.48	1	1
guanine nucleotide binding protein (G protein), beta polypeptide 2-like [Homo sapiens], GNB2L1	62896535	33.6	1.099	9	**1.373**	9	**1.392**	9	1.05	**1.449**	9	**1.492**	9	0.98	9.39	21.39	10	6	338.81	15.56	7	4	200.46	16.39	10	5
proteasomal ubiquitin receptor ADRM1 precursor [Homo sapiens], ADRM1	28373194	45.9	1.082	14	**1.349**	15	**1.317**	15	0.89	**1.354**	15	**1.307**	14	1.04	5.81	28.99	15	9	520.70	23.94	12	7	295.22	22.87	13	7
CDK5 and ABL1 enzyme substrate 1 isoform 1 [Homo sapiens] CABLES1	24308408	40.6	1.097	2	**1.328**	2	**1.327**	2	1.00	**1.324**	2	**1.380**	2	0.91	4.92	1.25	20	3	285.28	1.00	9	2	198.62	1.25	11	3
G1 to S phase transition protein 1 [Homo sapiens], GSPT1	119605536	71.7	1.051	1	**1.314**	1	**1.343**	1	0.94	**1.280**	1	**1.274**	1	1.03	5.48	8.82	2	1	68.21	8.82	1	1	34.84	8.82	1	1
CREB binding protein [Homo sapiens], CREBBP	194358893	7.5	1.053	27	**1.296**	28	**1.246**	28	1.01	**1.250**	28	**1.307**	28	1.09	8.02	27.58	30	9	1373.71	26.32	34	8	662.01	25.47	26	8
ELAV-like protein 1 [Homo sapiens], ELAVL1	38201714	37.2	1.079	8	**1.285**	8	**1.206**	8	0.83	**1.275**	8	**1.282**	8	1.17	8.81	19.18	16	6	426.52	19.18	8	6	177.91	19.18	8	6
Tumor protein 53 [Homo sapiens], TP53	187830777	45.8	1.084	21	**1.270**	21	**1.231**	21	0.88	**1.258**	21	**1.202**	21	1.11	6.98	27.53	13	7	579.47	25.00	14	6	244.37	12.03	10	4
histone deacetylase 6 [Homo sapiens], HDAC6	13128864	137.4	1.196	20	**1.262**	22	**1.376**	22	0.95	**1.302**	21	**1.207**	22	1.13	4.91	20.80	23	10	2874.58	17.79	25	15	1938.48	15.76	18	23
ribosomal protein L11 [Homo sapiens], RPL11	15431290	29.5	1.127	1	**1.260**	1	**1.283**	1	0.90	**1.262**	1	**1.286**	1	1.07	9.28	35.37	4	2	148.28	35.37	3	2	32.63	12.80	1	1
chromatin modifying protein 2B [Homo sapiens], CHMP2B	119589274	22.4	1.021	4	**1.257**	4	**1.314**	4	0.95	**1.247**	42	**1.319**	6	0.94	7.09	40.45	7	5	1915.50	40.45	40	11	774.24	37.92	2	3
serine/threonine kinase 11 [Homo sapiens], STK11	4507271	50.5	1.119	1	**1.252**	1	**1.312**	1	1.02	**1.345**	1	**1.419**	1	1.15	7.01	5.67	8	3	778.98	8.12	3	2	28.90	6.48	1	1
RNA-binding protein 38 isoform a [Homo sapiens], RBM38	34577107	25.1	1.040	2	**1.247**	3	**1.376**	3	0.90	**1.244**	3	**1.381**	3	1.19	7.40	9.62	5	2	107.28	9.62	2	2	80.01	9.62	3	2
itchy E3 ubiquitin protein ligase homolog [Homo sapiens], ITCH	56203993	95.4	1.090	14	**1.244**	14	**1.251**	14	0.99	**1.504**	14	**1.271**	14	0.88	6.40	9.24	15	8	559.05	8.25	13	7	276.57	8.50	12	7
DNA topoisomerase 1 [Homo sapiens], TOP1	11225260	84.7	1.086	8	**1.237**	8	**1.262**	8	1.15	**1.446**	8	**1.276**	8	0.85	9.31	5.23	10	4	177.53	5.23	6	4	77.94	2.48	4	2
DNA fragmentation factor subunit alpha isoform 2 [Homo sapiens], DFFA	47132600	29.4	1.096	6	**1.235**	6	**1.289**	6	0.97	**1.265**	6	**1.276**	6	0.86	4.61	15.30	11	3	271.62	15.30	5	3	171.98	15.30	6	3
sequestosome 1 [Homo sapiens], SQSTM1	4505571	59.8	1.139	6	**1.231**	6	**1.252**	6	1.14	**1.264**	6	**1.332**	6	1.08	5.85	23.78	6	5	431.33	23.78	6	5	494.02	17.83	6	4
Yes-associated protein 1 [Homo sapiens], YAP1	23398532	55.0	1.096	10	**1.229**	12	**1.254**	12	0.95	**1.302**	11	**1.207**	12	1.13	4.91	20.80	14	10	2874.58	17.79	6	5	1938.48	15.76	8	3
heat shock 70 kDa protein 4L [Homo sapiens], HSPA4L	31541941	94.5	1.088	2	**1.222**	2	**1.200**	2	1.10	**1.282**	2	**1.364**	2	1.11	5.88	6.91	3	3	534.68	6.91	2	3	244.78	6.91	2	3
apoptosis signal-regulating kinase 1 [Homo sapiens], ASK1	66391167	145.5	1.094	6	**1.216**	6	**1.289**	6	0.97	**1.280**	6	**1.274**	6	1.04	4.82	18.30	9	3	162.01	12.05	3	2	130.25	18.30	6	3
apoptosis-associated nuclear protein; pleckstrin like [Homo sapiens], PHLDA1	123094031	34.2	1.044	13	**1.207**	14	**1.259**	14	1.10	**1.242**	14	**1.248**	14	0.93	6.07	16.97	15	8	570.77	15.51	11	7	462.84	16.97	12	8
nuclear transcription factor Y, alpha [Homo sapiens], NFYA	56417679	34.7	0.953	6	**0.797**	6	**0.802**	6	0.85	**0.799**	6	**0.793**	6	0.97	6.39	13.36	8	4	772.49	11.94	9	5	404.48	9.27	9	3
histone acetyltransferase, KAT2B [Homo sapiens], KAT2B	40805843	94.6	0.982	1	**0.792**	1	**0.730**	1	1.02	**0.432**	1	**0.798**	1	0.94	4.67	6.79	5	6	712.45	6.56	3	2	39.10	6.87	1	1
regulatory-associated protein of mTOR isoform 1 [Homo sapiens], RPTOR	22094987	145.4	0.979	34	**0.782**	34	**0.792**	34	0.87	**0.660**	34	**0.726**	34	1.18	4.88	9.68	32	16	1078.04	8.51	28	14	524.18	5.79	24	10
PRKC apoptosis WT1 regulator protein [Homo sapiens], PAWR	55769533	36.5	0.921	2	**0.781**	2	**0.678**	2	1.15	**0.514**	2	**0.611**	2	0.84	5.41	8.82	4	2	147.51	8.82	2	2	118.70	8.82	2	2
transformation/transcription domain-associated protein [Homo sapiens], TRRAP	4507691	305.3	0.974	1	**0.778**	2	**0.711**	1	1.02	**0.767**	1	**0.756**	1	1.01	4.94	6.54	6	4	745.48	7.89	3	2	54.12	7.08	1	1
WW domain containing E3 ubiquitin protein ligase 1 [Homo sapiens], WWP1	23271281	105.8	0.990	48	**0.778**	48	**0.815**	48	0.98	**0.786**	48	**0.575**	48	1.13	5.17	51.87	43	8	1734.42	51.87	40	8	909.00	51.87	43	8
insulin-like growth factor-binding protein 2 precursor [Homo sapiens], IGFBP2	55925576	35.1	0.983	3	**0.771**	3	**0.726**	3	0.92	**0.726**	3	**0.752**	3	0.83	7.50	2.74	4	1	49.19	2.74	1	1	89.57	2.74	3	1
cell cycle-associated protein 1 isoform 1 [Homo sapiens], CAPRIN1	42558250	77.9	0.977	6	**0.765**	6	**0.726**	6	0.81	**0.727**	6	**0.750**	6	1.18	7.66	3.75	13	2	422.95	3.75	6	2	106.56	3.75	7	2
Cbp/p300-interacting transactivator 1 [Homo sapiens], CITED1	222136692	22.1	0.968	1	**0.758**	1	**0.762**	1	1.15	**0.764**	1	**0.763**	1	1.11	6.13	3.15	2	1	66.61	3.15	1	1	47.84	3.15	1	1
serine/threonine-protein kinase LATS2 [Homo sapiens], LATS2	126507091	111.5	0.905	27	**0.756**	28	**0.755**	28	1.01	**0.750**	28	**0.607**	28	1.09	8.02	27.58	30	9	1373.71	26.32	34	8	662.01	25.47	36	8
Autophagy-related protein 14, beclin-1 associated protien [Homo sapiens], ATG14	50540545	54.5	0.947	9	**0.746**	9	**0.750**	9	1.08	**0.740**	9	**0.766**	9	1.16	5.33	28.05	18	4	486.50	28.05	9	4	236.61	28.05	9	4
mediator of DNA-damage checkpoint 1 [Homo sapiens], MDC1	168985671	33.2	0.874	1	**0.746**	1	**0.777**	1	0.97	**0.739**	1	**0.735**	1	1.03	7.17	5.76	2	2	68.19	5.76	2	2	0.00	0.00	2	2
eukaryotic translation initiation factor 2C2, argonaute 2 [Homo sapiens], EIF2C2	29171734	94.1	0.985	3	**0.743**	3	**0.762**	3	0.87	**0.724**	3	**0.869**	3	0.83	9.19	5.70	7	4	177.14	4.77	3	3	57.97	4.54	4	3
DNA topoisomerase 2-alpha [Homo sapiens], TOP2A	19913406	174.3	0.807	2	**0.733**	2	**0.755**	2	0.98	**0.743**	2	**0.718**	2	1.03	8.72	3.33	7	4	143.21	3.33	4	4	47.44	2.61	3	3
helicase, lymphoid-specific [Homo sapiens], HELLS	21914927	92.9	0.711	6	**0.726**	6	**0.564**	6	0.81	**0.768**	6	**0.650**	6	1.18	7.66	3.75	13	2	422.95	3.75	6	2	106.56	3.75	7	2
nucleus accumbens-associated protein 1 [Homo sapiens], NAC1	16418383	56.4	0.901	5	**0.726**	5	**0.746**	5	0.89	**0.728**	5	**0.731**	5	0.99	5.27	15.69	8	4	165.73	15.69	4	4	122.74	11.70	4	3
C-terminal-binding protein 1 isoform 1 [Homo sapiens], CTBP1	4557497	48.3	0.913	1	**0.725**	1	**0.728**	1	0.90	**0.762**	1	**0.653**	1	1.07	9.28	35.37	4	2	148.28	35.37	3	2	32.63	12.80	1	1
high mobility group protein box 1 [Homo sapiens], HMGB1	48145843	23.6	0.905	3	**0.725**	3	**0.729**	3	1.10	**0.755**	3	**0.731**	3	1.19	5.12	5.14	4	2	84.19	2.86	1	1	44.02	5.14	3	2
activating transcription factor 3 [Homo sapiens], ATF3	55665721	19.8	0.933	2	**0.723**	2	**0.725**	2	0.81	**0.753**	2	**0.729**	2	0.82	7.03	51.92	4	4	5402.07	51.92	4	4	1829.81	49.13	4	4
growth arrest and DNA damage-inducible-interacting protein 1 [Homo sapiens], GADD45GIP1	31543415	25.4	0.906	3	**0.722**	3	**0.676**	3	1.07	**0.443**	3	**0.540**	3	0.82	10.02	4.50	5	1	77.15	4.50	2	1	84.09	4.50	3	1
inhibitor of nuclear factor kappa-B kinase subunit beta isoform 1 [Homo sapiens], IKKB	41352712	83.0	0.993	9	**0.722**	9	**0.711**	9	1.05	**0.645**	9	**0.549**	9	0.98	9.39	21.39	10	6	338.81	15.56	7	4	200.46	16.39	10	5
sirtuin 1 [Homo sapiens], SIRT1	7555471	83.0	0.936	15	**0.720**	15	**0.728**	15	1.07	**0.643**	15	**0.632**	15	1.08	5.24	38.83	15	6	375.94	27.18	9	4	260.07	38.83	16	6
High-mobility group nucleosome binding domain 1 [Homo sapiens], HMGN1	78070343	11.2	0.956	2	**0.719**	2	**0.841**	2	1.09	**0.643**	2	**0.764**	2	0.84	8.27	33.96	4	2	711.89	33.96	5	2	133.16	16.42	4	3
p53 apoptosis effector related to PMP-22 [Homo sapiens], PERP	31377722	21.1	0.953	6	**0.717**	6	**0.780**	6	0.90	**0.746**	6	**0.745**	6	1.00	8.66	3.02	12	2	221.79	1.51	5	1	171.19	3.02	7	2
zinc finger protein 143 [Homo sapiens], ZNF143	116014328	70.5	0.901	22	**0.715**	22	**0.724**	22	0.93	**0.781**	22	**0.695**	22	1.05	6.01	44.21	24	11	859.52	44.21	21	10	506.38	43.86	23	10
signal transducer and activator of transcription 3 isoform 1 [Homo sapiens], STAT3	21618340	86.7	0.962	1	**0.712**	1	**0.767**	1	1.02	**0.712**	1	**0.745**	1	1.24	7.67	6.34	9	4	678.12	6.78	3	2	31.70	5.98	1	1
endoplasmic reticulum lumenal Ca2+ binding protein grp78 [Homo sapiens], GRP78	7229462	72.5	0.971	9	**0.710**	9	**0.732**	9	0.83	**0.780**	9	**0.633**	9	1.09	5.94	44.04	9	8	469.17	39.45	16	7	355.58	22.48	9	5
stress-associated endoplasmic reticulum protein 1 [Homo sapiens], SERP1	7657552	7.6	0.902	4	**0.709**	4	**0.775**	4	0.91	**0.646**	4	**0.713**	4	0.91	6.71	30.58	4	1	1340.84	28.71	3	1	908.44	24.20	4	1
NF-kappa-B essential modulator isoform c [Homo sapiens], IKKG	223671872	36.9	0.979	1	**0.705**	1	**0.783**	1	0.89	**0.777**	1	**0.773**	1	1.00	6.21	5.00	1	1	34.38	0.00	3	3	47.41	5.00	1	1
beclin-1 [Homo sapiens], BECN1	4502395	50.5	0.929	3	**0.685**	3	**0.683**	3	1.00	**0.613**	3	**0.691**	3	0.89	6.43	2.68	4	3	99.40	2.68	3	3	36.84	0.97	1	1
cell division cycle and apoptosis regulator protein 1 [Homo sapiens], CCAR1	80477260	91.7	0.836	2	**0.676**	2	**0.669**	2	1.01	**0.587**	2	**0.694**	2	0.85	5.76	1.65	3	2	80.43	0.87	1	1	30.00	1.65	2	2

histone-lysine N-methyltransferase EZH2 isoform b [Homo sapiens], EZH2	23510384	78.3	0.913	11	**0.669**	11	**0.653**	11	1.02	**0.643**	11	**0.670**	11	0.85	6.32	10.25	10	8	549.55	9.21	9	7	215.23	8.81	9	6
sterol regulatory element-binding factor 1 [Homo sapiens], SREBF1	66932902	149.5	0.974	2	**0.665**	2	**0.671**	2	1.00	**0.644**	2	**0.680**	2	0.91	4.92	1.25	2	3	285.28	1.00	9	2	198.62	1.25	3	3
histone deacetylase 1 [Homo sapiens], HDAC1	49456395	53.6	0.904	16	**0.647**	16	**0.650**	16	1.16	**0.642**	16	**0.621**	16	1.18	8.53	11.13	16	11	417.44	8.40	12	8	143.92	6.85	9	7
autophagy-related protein 3 [Homo sapiens], ATG3	19526773	35.8	0.910	7	**0.630**	7	**0.647**	7	0.99	**0.625**	7	**0.647**	7	1.05	4.74	13.06	11	3	257.80	9.87	6	2	132.33	7.32	5	2
histone deacetylase 2 [Homo sapiens], HDAC2	71051977	62.4	0.953	7	**0.624**	7	**0.632**	7	0.93	**0.637**	7	**0.624**	7	1.11	6.92	10.61	13	2	173.50	10.61	6	2	133.63	10.61	7	2
metastasis-associated protein [Homo sapiens], MTA1	115527080	79.8	0.911	3	**0.622**	3	**0.629**	3	0.93	**0.624**	3	**0.611**	3	1.12	6.87	24.73	2	6	467.67	21.70	10	5	289.05	17.31	2	5
special AT-rich sequence binding protein 2 [Homo sapiens], SATB2	289547596	80.5	0.953	6	**0.617**	6	**0.680**	6	0.90	**0.646**	6	**0.645**	6	1.00	8.66	3.02	12	2	221.79	1.51	5	1	171.19	3.02	7	2
apoptosis-stimulating of p53 protein 1 [Homo sapiens], ASPP1	121114287	110.0	0.914	4	**0.427**	4	**0.558**	4	0.85	**0.544**	4	**0.484**	4	1.15	8.54	13.43	18	5	367.22	11.51	11	4	116.66	8.87	7	4
histone acetyltransferase KAT5 isoform 1 [Homo sapiens], KAT5	36287069	59.8	0.916	1	**0.238**	1	**0.241**	1	0.83	**0.235**	1	**0.248**	1	1.02	7.01	49.03	1	1	3911.15	38.41	1	1	1804.71	40.34	1	1

Figure S3


A.
Log2 iTRAQ ratio
-0.095 (55)
0.079 (183)
-1.5
-1.0
-0.5
0
0.5
1.0
1.5
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0
-Log10 (p-value)
PPP2R1A
PIAS
HMGB1
HDAC1
RAD51
STK11
TP53
HDAC6
PAWR
CCAR
SCRIB
TP63
iASPP
SAP18
KAT5
SIN3B
p=0.05
iTRAQ ratio <0.8
iTRAQ ratio >1.2

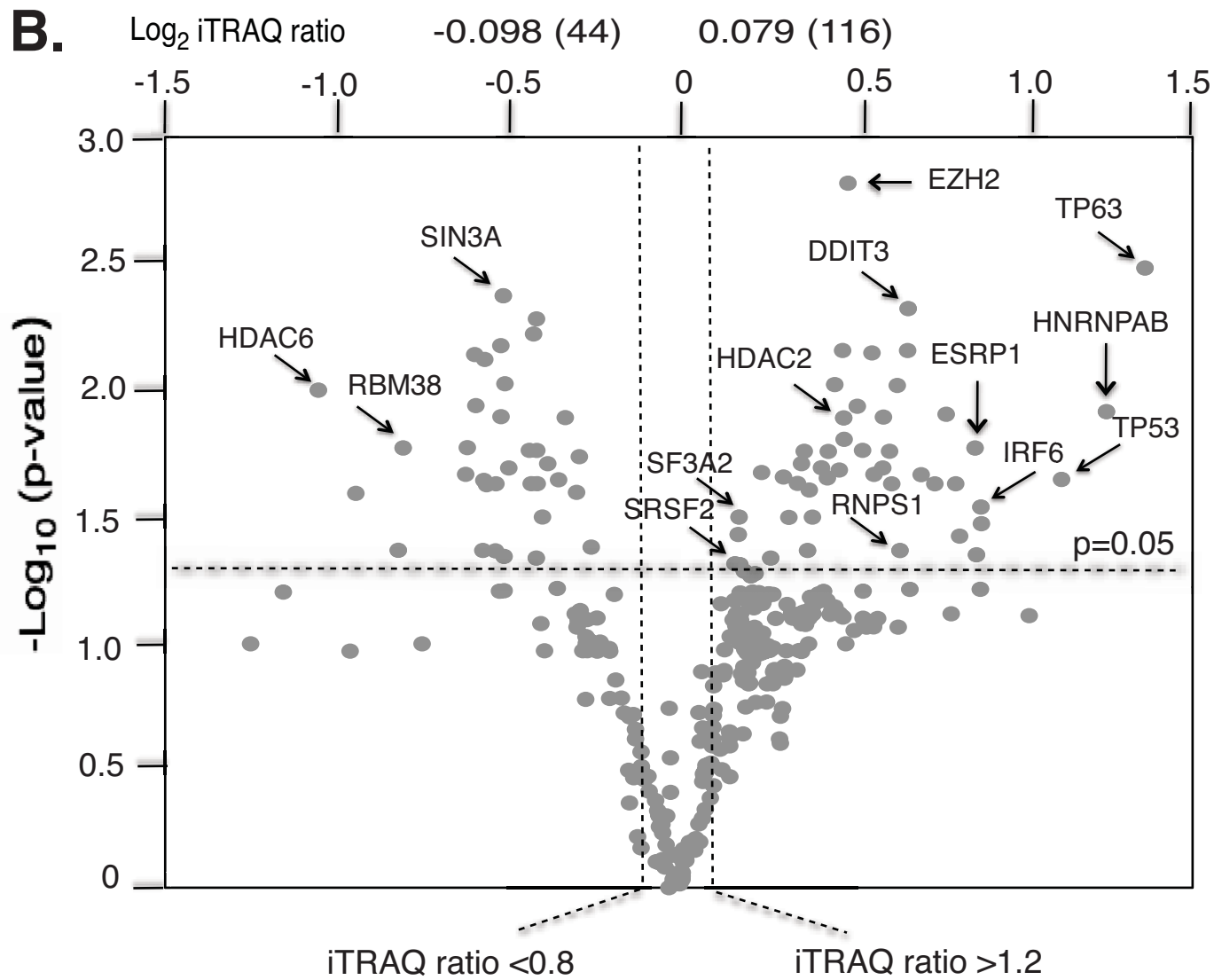
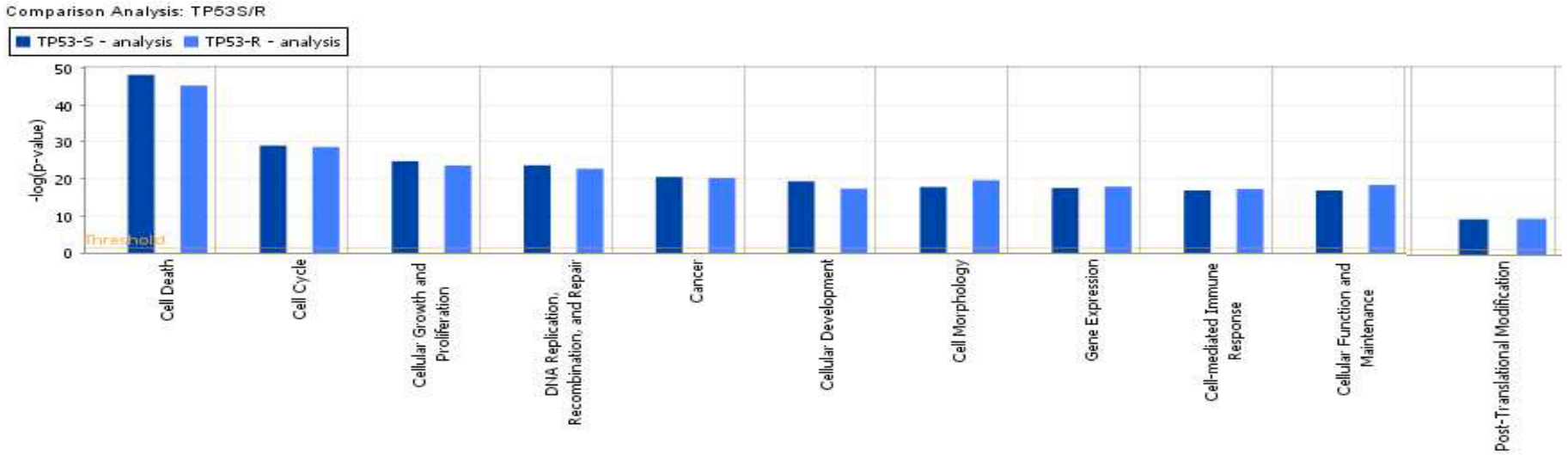

B.
Log2 iTRAQ ratio
-0.098 (44)
0.079 (116)
-1.5
-1.0
-0.5
0
0.5
1.0
1.5
3.0
2.5
2.0
1.5
1.0
0.5
0
-Log10 (p-value)
EZH2
TP63
SIN3A
DDIT3
HNRNPAB
HDAC6
HDAC2
ESRP1
RBM38
TP53
IRF6
SF3A2
SRSF2
RNPS1
p=0.05
iTRAQ ratio <0.8
iTRAQ ratio >1.2

Figure S4



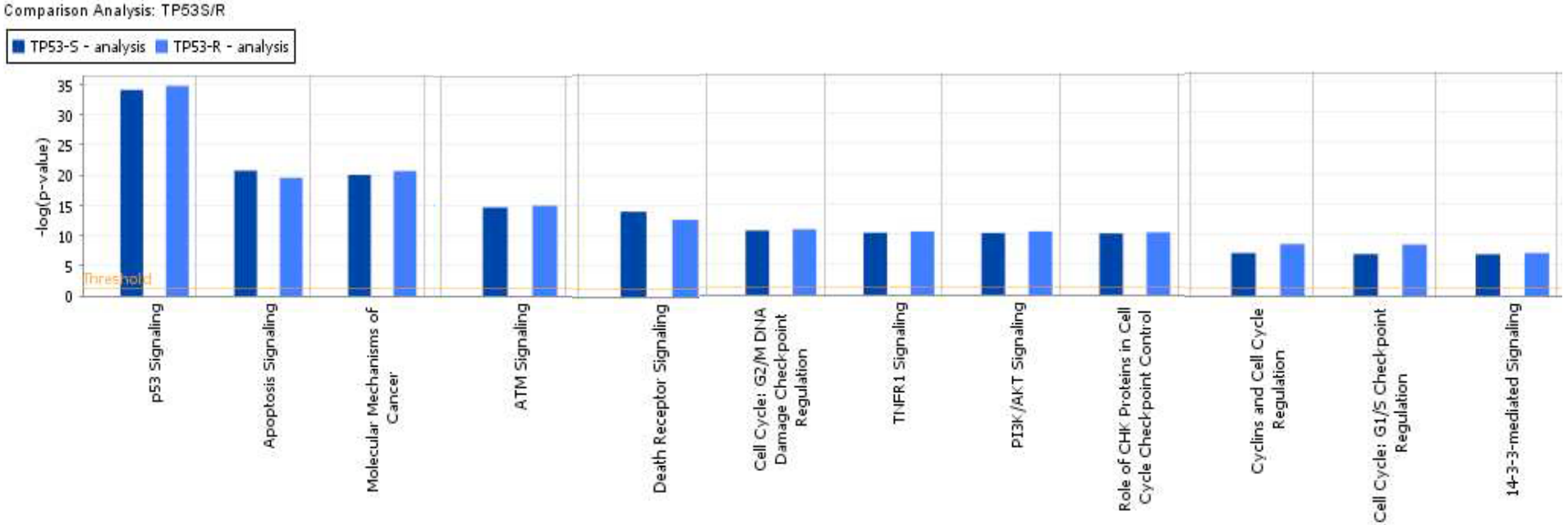
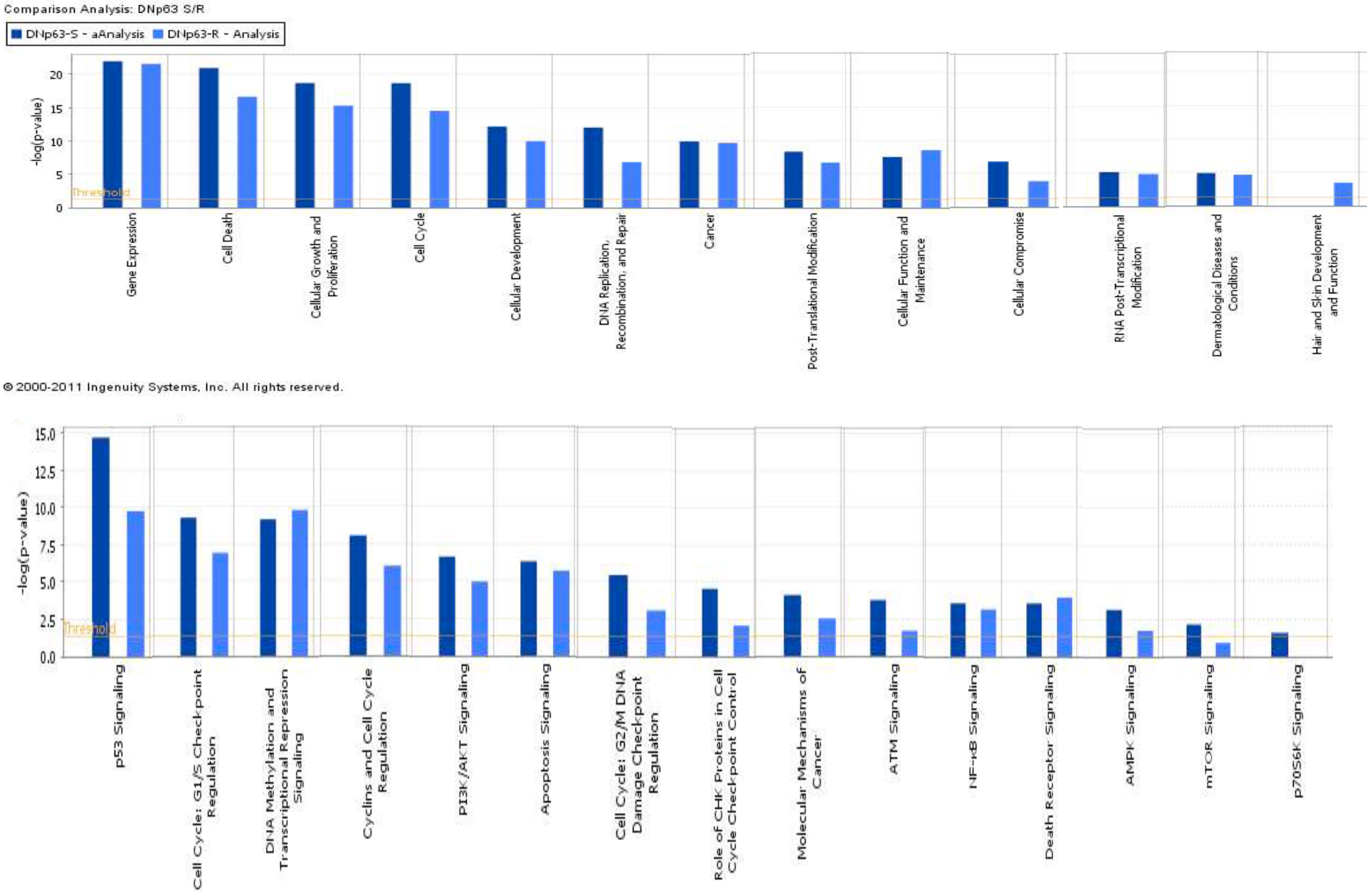


Figure S5


Comparison Analysis: DNp63 S/R
DNp63-S - aAnalysis
DNp63-R - Analysis
-log(p-value)
Threshold
Gene Expression
Cell Death
Cellular Growth and Proliferation
Cell Cycle
Cellular Development
DNA Replication, Recombination, and Repair
Cancer
Post-Translational Modification
Cellular Function and Maintenance
Cellular Compromise
RNA Post-Transcriptional Modification
Dermatological Diseases and Conditions
Hair and Skin Development and Function
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p53 Signaling
Cell Cycle: G1/S Checkpoint Regulation
DNA Methylation and Transcriptional Repression Signaling
Cyclins and Cell Cycle Regulation
PI3K/AKT Signaling
Apoptosis Signaling
Cell Cycle: G2/M DNA Damage Checkpoint Regulation
Role of CHK Proteins in Cell Cycle Checkpoint Control
Molecular Mechanisms of Cancer
ATM Signaling
NF-κB Signaling
Death Receptor Signaling
AMPK Signaling
mTOR Signaling
p70S6K Signaling