

Figure S1. Screening of protein phosphorylation (S/T/Y) profiling in bladder cancer cell lines. Western blotting scanning in bladder cancer cells of phosphorylation that occurred on serine, threonine, and tyrosine. KD, knockdown; Control, wild-type.

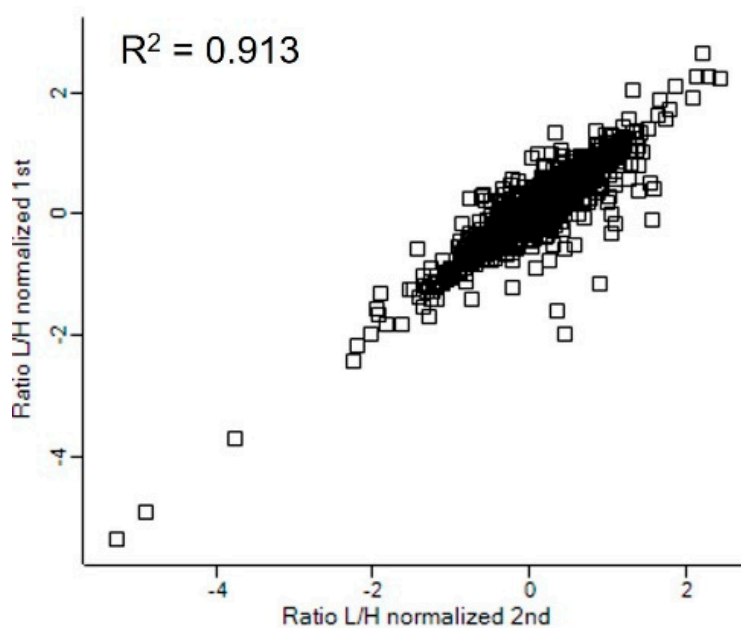


Figure S2. Phosphoproteomics correlation of bladder cancer. Pearson correlation of phosphoproteomes between technical samples.

Table S1. Summary of differentially expressed proteins.

UniProt IDs	Protein Names	Gene Names
F8WF12	Golgin subfamily B member 1	GOLGB1
P42677	40S ribosomal protein S27 (Metallopan-stimulin 1) (MPS-1) (Small ribosomal subunit protein eS27)	RPS27
H7C5M1	RNA-binding protein 34 (Fragment)	RBM34

P10412	Histone H1.4 (Histone H1b) (Histone H1s-4)	H1-4
F2Z2T1	Nuclear cap-binding protein subunit 1	NCBP1
B1AMJ5	CDK5 regulatory subunit-associated protein 2 (Fragment)	CDK5RAP2
K7EN42	Glycylpeptide N-tetradecanoyltransferase 1 (Fragment)	NMT1
D6RI08	OCIA domain-containing protein 1 (Fragment)	OCIAD1
Q53EU6	Glycerol-3-phosphate acyltransferase 3 (GPAT-3) (EC 2.3.1.15) (1-acyl-sn-glycerol-3-phosphate O-acyltransferase 10) (AGPAT 10)	GPAT3
	(1-acyl-sn-glycerol-3-phosphate O-acyltransferase 9) (1-AGP acyltransferase 9) (1-AGPAT 9) (EC 2.3.1.51) (Acyl-CoA:glycerol-3-phosphate acyltransferase 3) (hGPAT3)	
	(Lung cancer metastasis-associated protein 1) (Lysophosphatidic acid acyltransferase theta) (LPAAT-theta) (MAG-1)	
C9JEN3	Protein lifeguard 3 (Fragment)	TMBIM1
F8WBL2	Bystin	BYSL
Q96RS0	Trimethylguanosine synthase (EC 2.1.1.-) (CLL-associated antigen KW-2) (Cap-specific guanine-N2 methyltransferase) (Hepatocellular carcinoma-associated antigen 137)	TGS1
	(Nuclear receptor coactivator 6-interacting protein) (PRIP-interacting protein with methyltransferase motif) (PIMT) (PIPMT)	
J3KP30	Deoxynucleotidyltransferase terminal-interacting protein 2	DNTTIP2
O75683	Surfeit locus protein 6	SURF6
O95297	Myelin protein zero-like protein 1 (Protein zero-related)	MPZL1
K7EPZ6	Methyl-CpG-binding domain protein 1 (Fragment)	MBD1
G5E9C0	SP110 nuclear body protein, isoform CRA_b (Sp110 nuclear body protein)	SP110
P07550	Beta-2 adrenergic receptor (Beta-2 adrenoreceptor) (Beta-2 adrenoceptor)	ADRB2
F8WBW8	BAH and coiled-coil domain-containing protein 1	BAHCC1
Q8NEF9	Serum response factor-binding protein 1 (SRF-dependent transcription regulation-associated protein) (p49/STRAP)	SRFBP1
E7ES96	Presenilin (EC 3.4.23.-)	PSEN1
P28715	DNA repair protein complementing XP-G cells (EC 3.1.-.-) (DNA excision repair protein ERCC-5) (Xeroderma pigmentosum group G-complementing protein)	ERCC5
F5H6E2	Unconventional myosin-Ic	MYO1C
Q8TB61	Adenosine 3'-phospho 5'-phosphosulfate transporter 1 (PAPS transporter 1) (Putative MAPK-activating protein PM15) (Putative NF-kappa-B-activating protein 48) (Solute carrier family 35 member B2)	SLC35B2
O75151	Lysine-specific demethylase PHF2 (EC 1.14.11.-) (GRC5) (PHD finger protein 2)	PHF2
Q13206	Probable ATP-dependent RNA helicase DDX10 (EC 3.6.4.13) (DEAD box protein 10)	DDX10
O95453	Poly(A)-specific ribonuclease PARN (EC 3.1.13.4) (Deadenylating nuclease) (Deadenylation nuclease) (Polyadenylate-specific ribonuclease)	PARN
Q9ULF5	Zinc transporter ZIP10 (Solute carrier family 39 member 10) (Zrt- and Irt-like protein 10) (ZIP-10)	SLC39A10
B4DTR1	Receptor tyrosine-protein kinase erbB-2 (cDNA FLJ59426, highly similar to Receptor tyrosine-protein kinase erbB-2)	ERBB2
Q13206	Probable ATP-dependent RNA helicase DDX10 (EC 3.6.4.13) (DEAD box protein 10)	DDX10
Q13428	Treacle protein (Treacher Collins syndrome protein)	TCOF1
E9PFD7	Receptor protein-tyrosine kinase (EC 2.7.10.1)	EGFR
Q92508	Piezo-type mechanosensitive ion channel component 1 (Membrane protein induced by beta-amyloid treatment) (Mib) (Protein FAM38A)	PIEZO1
Q92508	Piezo-type mechanosensitive ion channel component 1 (Membrane protein induced by beta-amyloid treatment) (Mib) (Protein FAM38A)	PIEZO1
O00161	Synaptosomal-associated protein 23 (SNAP-23) (Vesicle-membrane fusion protein SNAP-23)	SNAP23
O00161	Synaptosomal-associated protein 23 (SNAP-23) (Vesicle-membrane fusion protein SNAP-23)	SNAP23
J3QSV6	Ribosomal L1 domain-containing protein 1 (Fragment)	RSL1D1
P46821	Microtubule-associated protein 1B (MAP-1B)	MAP1B
J3QSV6	[Cleaved into: MAP1B heavy chain; MAP1 light chain LC1]	
J3QSV6	Ribosomal L1 domain-containing protein 1 (Fragment)	RSL1D1
O00161	Synaptosomal-associated protein 23 (SNAP-23) (Vesicle-membrane fusion protein SNAP-23)	SNAP23

O43707	Alpha-actinin-4 (Non-muscle alpha-actinin 4)	ACTN4
Q9H3N1	Thioredoxin-related transmembrane protein 1 (Thioredoxin domain-containing protein 1) (Transmembrane Trx-related protein)	TMX1
Q9BQG0	Myb-binding protein 1A	MYBBP1A
Q9H6F5	Coiled-coil domain-containing protein 86 (Cytokine-induced protein with coiled-coil domain)	CCDC86
A0A0G2JNZ2	Protein scribble homolog	SCRIB
A0A0G2JNZ2	Protein scribble homolog	SCRIB
A0A2U3TZL8	Kinesin-like protein	KIF23
P07355	Annexin A2 (Annexin II) (Annexin-2) (Calpactin I heavy chain) (Calpactin-1 heavy chain) (Chromobindin-8) (Lipocortin II) (Placental anticoagulant protein IV) (PAP-IV) (Protein I) (p36)	ANXA2
P07355	Annexin A2 (Annexin II) (Annexin-2) (Calpactin I heavy chain) (Calpactin-1 heavy chain) (Chromobindin-8) (Lipocortin II) (Placental anticoagulant protein IV) (PAP-IV) (Protein I) (p36)	ANXA2
Q96PD2	Discoidin, CUB and LCCL domain-containing protein 2 (CUB, LCCL and coagulation factor V/VIII-homology domains protein 1) (Endothelial and smooth muscle cell-derived neuropilin-like protein)	DCBLD2
P20337	Ras-related protein Rab-3B	RAB3B
Q9BVJ6	U3 small nucleolar RNA-associated protein 14 homolog A (Antigen NY-CO-16) (Serologically defined colon cancer antigen 16)	UTP14A
Q9BQG0	Myb-binding protein 1A	MYBBP1A
Q6ZRP7	Sulfhydryl oxidase 2 (EC 1.8.3.2) (Neuroblastoma-derived sulfhydryl oxidase) (Quiescin Q6-like protein 1)	QSOX2
Q8IWS0	PHD finger protein 6 (PHD-like zinc finger protein)	PHF6
P46013	Proliferation marker protein Ki-67 (Antigen identified by monoclonal antibody Ki-67) (Antigen KI-67) (Antigen Ki67)	MKI67
Q13501	Sequestosome-1 (EBI3-associated protein of 60 kDa) (EBIAP) (p60) (Phosphotyrosine-independent ligand for the Lck SH2 domain of 62 kDa) (Ubiquitin-binding protein p62)	SQSTM1
Q8WYP5	Protein ELYS (Embryonic large molecule derived from yolk sac) (Protein MEL-28) (Putative AT-hook-containing transcription factor 1)	AHCTF1
Q9NR30	Nucleolar RNA helicase 2 (EC 3.6.4.13) (DEAD box protein 21) (Gu-alpha) (Nucleolar RNA helicase Gu) (Nucleolar RNA helicase II) (RH II/Gu)	DDX21
P02545	Prelamin-A/C [Cleaved into: Lamin-A/C (70 kDa lamin) (Renal carcinoma antigen NY-REN-32)]	LMNA
Q8N556	Actin filament-associated protein 1 (110 kDa actin filament-associated protein) (AFAP-110)	AFAP1
Q8NFH5	Nucleoporin NUP35 (35 kDa nucleoporin) (Mitotic phosphoprotein 44) (MP-44) (Nuclear pore complex protein Nup53) (Nucleoporin NUP53)	NUP35
P49006	MARCKS-related protein (MARCKS-like protein 1) (Macrophage myristoylated alanine-rich C kinase substrate) (Mac-MARCKS) (MacMARCKS)	MARCKSL1
P11388	DNA topoisomerase 2-alpha (EC 5.6.2.2) (DNA topoisomerase II, alpha isozyme)	TOP2A
P02545	Prelamin-A/C [Cleaved into: Lamin-A/C (70 kDa lamin) (Renal carcinoma antigen NY-REN-32)]	LMNA
P20700	Lamin-B1	LMNB1
Q09666	Neuroblast differentiation-associated protein AHNAK (Desmoyokin)	AHNAK
P46087	Probable 28S rRNA (cytosine(4447)-C(5))-methyltransferase (EC 2.1.1.-) (Nucleolar protein 1) (Nucleolar protein 2 homolog) (Proliferating-cell nucleolar antigen p120) (Proliferation-associated nucleolar protein p120)	NOP2
Q9UQ35	Serine/arginine repetitive matrix protein 2 (300 kDa nuclear matrix antigen) (Serine/arginine-rich splicing factor-related nuclear matrix protein of 300 kDa) (SR-related nuclear matrix protein of 300 kDa) (Ser/Arg-related nuclear matrix protein of 300 kDa) (Splicing coactivator subunit SRm300) (Tax-responsive enhancer element-binding protein 803) (TaxREB803)	SRRM2
Q09666	Neuroblast differentiation-associated protein AHNAK (Desmoyokin)	AHNAK
Q9P2E9	Ribosome-binding protein 1 (180 kDa ribosome receptor homolog) (RRp) (ES/130-related protein) (Ribosome receptor protein)	RRBP1
Q09666	Neuroblast differentiation-associated protein AHNAK (Desmoyokin)	AHNAK

F8W6I7	Helix-destabilizing protein (Heterogeneous nuclear ribonucleoprotein A1) (Heterogeneous nuclear ribonucleoprotein A1, N-terminally processed) (hnRNP core protein A1)	HNRNPA1
Q9H6F5	Coiled-coil domain-containing protein 86 (Cytokine-induced protein with coiled-coil domain)	CCDC86
P07355	Annexin A2 (Annexin II) (Annexin-2) (Calpactin I heavy chain) (Calpactin-1 heavy chain) (Chromobindin-8) (Lipocortin II) (Placental anticoagulant protein IV) (PAP-IV) (Protein I) (p36)	ANXA2
O94804	Serine/threonine-protein kinase 10 (EC 2.7.11.1) (Lymphocyte-oriented kinase)	STK10
A0A087WWP4	RNA-binding protein 15	RBM15
A0A087WWP4	RNA-binding protein 15	RBM15
P16401	Histone H1.5 (Histone H1a) (Histone H1b) (Histone H1s-3)	H1-5

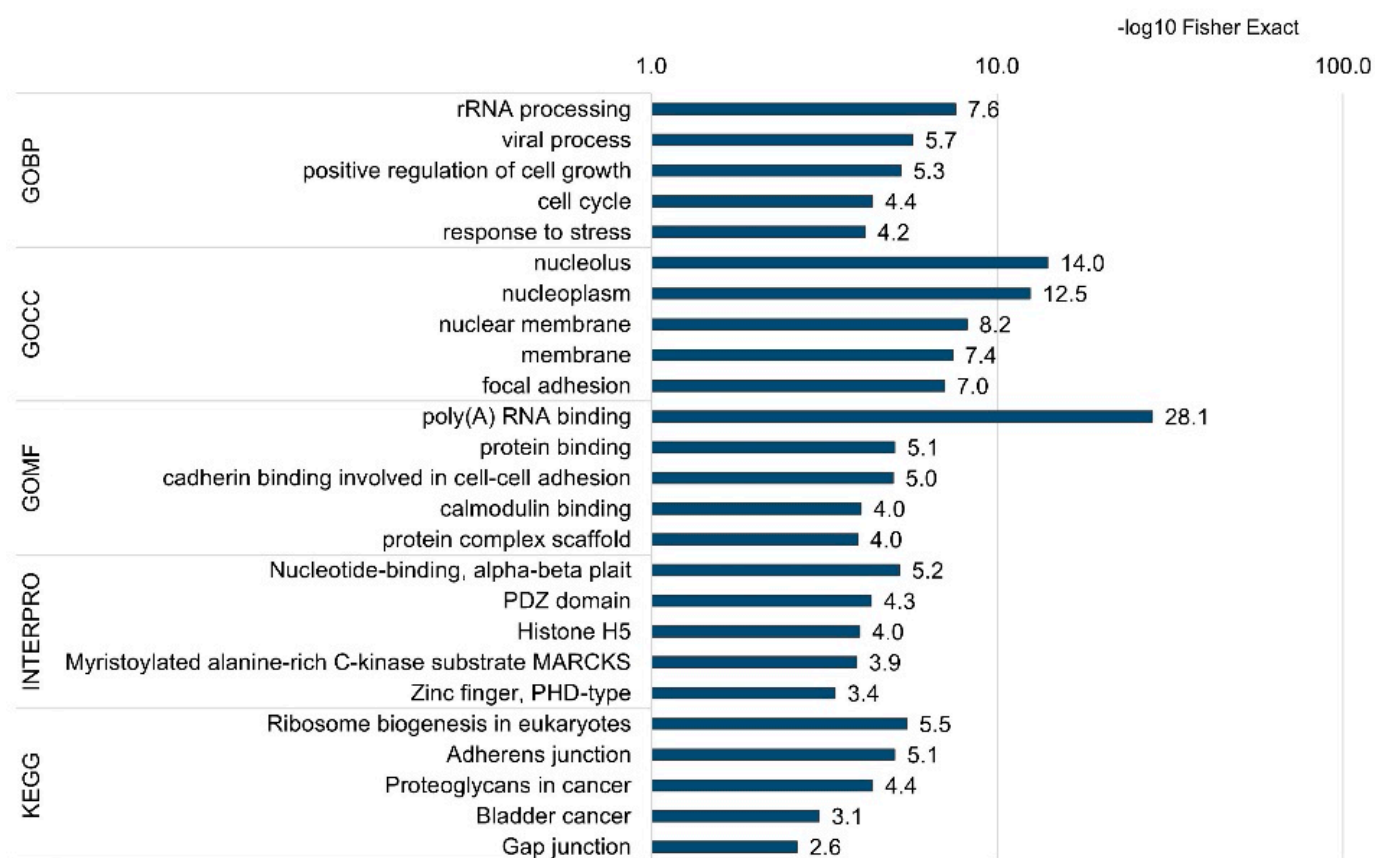


Figure S3. DAVID analysis of differentially expressed proteins. Downregulated phosphoproteins. GOBP, Gene Ontology Biological Process; CC: cellular component; MF, molecular function; KEGG, Kyoto Encyclopedia of Genes and Genomes.