

Table 1. Proteins identified in anti-phosphotyrosine immunoprecipitates from pervanadate-treated WEHI-231 cells.

Name ¹	Expect Value ²	No Pept ³	Protein GI Number	Tyr Phos Ref	AfCS ID	Experiment ⁴			
						PY1	PY2	PT1	PT2
14-3-3 zeta	1.10E-11	4	GI:1841387		A000060	●			
Acidic nuclear phosphoprotein 32; Anp32; PHAP1	5.60E-03	3	GI:6753056			●			
Aconitase 2	6.40E-03	3	GI:18079339				●		
Actin, beta	2.90E-32	11	GI:6671509		A000191	●	●		
Actinin, alpha 1	2.00E-22	6	GI:112959	PMID:11369769	A000194			●	
Actinin, alpha 4	2.60E-81	25	GI:11230802	PMID:11369769	A000197			●	●
ADP, ATP carrier protein	5.30E-04	3	GI:1703188		A000216	●	●		
ADP-ribosyltransferase	4.60E-07	2	GI:1184544			●			
Aiolos	1.10E-07	2	GI:2150044	PMID:11714801	A000231			●	
Aldehyde dehydrogenase 2	2.40E-15	8	GI:6753036			●	●		
Aldose reductase	1.80E-06	3	GI:3046247			●			
Annexin A11	1.10E-05	3	GI:15277556	PMID:10559235	A003257		●		
Arsenite-resistance protein 2b	1.60E-13	7	GI:13492031				●	●	●
ATP synthase	3.00E-56	20	GI:6680748			●	●		
Bcl-2-associated transcription factor	5.10E-23	7	GI:7582386					●	
Bip; GRP78	7.00E-32	11	GI:2598562	PMID:7517674	A001103	●		●	
C2 domain-containing protein	9.50E-09	6	GI:15079291				●		●
Calnexin	1.10E-17	5	GI:6671664		A000464	●	●		
Capping protein alpha 1	1.10E-04	3	GI:16740716				●		
Chaperonin hsp60	2.00E-24	6	GI:284763			●	●		

Name ¹	Expect Value ²	No Pept ³	Protein GI Number	Tyr Phos Ref	AfCS ID	Experiment ⁴			
						PY1	PY2	PT1	PT2
Chaperonin subunit 2; Cct2	1.30E-06	3	GI:6671700			●	●		
Chaperonin subunit 4; Cct4	5.30E-11	5	GI:6753322				●		
Chaperonin subunit 5; Cct5	9.00E-11	2	GI:6671702			●			
Chaperonin subunit 6a; Cct6a	1.00E-05	3	GI:6753324				●		
Clathrin heavy chain (rat)	8.90E-180	57	GI:9506497	PMID:12387739	A000663	●	●	●	●
Cleavage and polyadenylation specific factor 6	2.40E-08	5	GI:16751835				●	●	●
Coronin 1A	6.00E-03	3	GI:12644086				●		
DEAD/H box polypeptide 1	4.00E-04	4	GI:19527256				●		
DEAD/H box polypeptide 3; PL10; Polymerase-associated factor PAF67; Tyrosine-rich heat shock protein	1.50E-42	19	GI:18700307					●	●
DEAD/H box polypeptide 5; p68 RNA helicase	1.20E-22	16	GI:6681157			●		●	●
Deubiquitinating enzyme Usp15	1.10E-13	8	GI:18653399						●
DnaK-type molecular chaperone; Heat shock protein 74 kDa; Mortalin	1.60E-16	7	GI:6754256	PMID:11162655		●		●	●
E1B-55 kDa-associated protein 5	1.90E-13	9	GI:18204832						●
Elongation factor 1 alpha	2.80E-17	10	GI:72870			●	●		
Elongation factor 2	1.30E-23	8	GI:18202285	PMID:1708237		●	●	●	●
Enolase	2.00E-14	9	GI:13637776	PMID:7629021		●	●		
Eukaryotic translation initiation factor 3, subunit 7	2.80E-03	3	GI:9055214					●	
Eukaryotic translation initiation factor 3, subunit 8	8.60E-09	5	GI:19354442					●	
Eukaryotic translation initiation factor 3, subunit 10	1.30E-20	10	GI:6686292				●	●	●
Eukaryotic translation initiation factor 4A	1.70E-13	4	GI:4503529				●		
Ewing sarcoma protein	9.80E-13	4	GI:6679715	PMID:10588700				●	●

Name ¹	Expect Value ²	No Pept ³	Protein GI Number	Tyr Phos Ref	AfCS ID	Experiment ⁴			
						PY1	PY2	PT1	PT2
Fibrillarin (human)	3.40E-05	3	GI:182592			●			
FUS RNA-binding protein	5.70E-27	12	GI:8928084					●	●
FUSE binding protein 1	7.00E-08	5	GI:16975504					●	
Glucose regulated protein 58 kDa; Grp58	2.10E-09	4	GI:6679687			●			
Glyceraldehyde-3-phosphate dehydrogenase	4.40E-21	6	GI:6679937			●	●		
GPI-anchored membrane protein 1	1.20E-09	3	GI:2137361					●	
Heat shock protein 70; Heat shock 70 kD protein 8; Hsc70	1.90E-52	16	GI:123651	PMID:11168378		●	●	●	●
Heat shock protein 84; Heat shock protein 90-beta	2.50E-61	20	GI:72223			●	●	●	
Heat shock protein 86; Heat shock protein 90	1.90E-48	11	GI:6754254		A002511	●	●	●	
Heat shock protein 110; Hspa4	1.00E-06	5	GI:13278232			●			
Hematopoietic cell-specific Lyn substrate 1	9.80E-35	10	GI:6680187	PMID:7628441	A001149			●	
Hemopoietic cell phosphatase; SHP-1	8.50E-04	3	GI:15215088		A002156		●	●	●
Heterogeneous nuclear ribonucleoprotein A2	5.60E-07	2	GI:7949053			●			
Heterogeneous nuclear ribonucleoprotein K; kappa-B motif binding protein	1.70E-49	19	GI:13384620	PMID:2052863			●	●	●
Heterogeneous nuclear ribonucleoprotein R	1.10E-07	5	GI:17066599				●	●	
Heterogeneous nuclear ribonucleoprotein U; System N1 Na+ and H+-coupled glutamine transporter	6.90E-10	4	GI:16923996			●			●
Histone H2A	3.10E-10	4	GI:19354428		A001129	●			
Histone H2B	2.50E-07	5	GI:2119001		A001130	●			
Histone 4	1.40E-21	6	GI:7305141		A001132	●			
Ikaros	4.20E-09	3	GI:3915731		A001169			●	●
Importin 9	4.40E-08	5	GI:15186758						●

Name ¹	Expect Value ²	No Pept ³	Protein GI Number	Tyr Phos Ref	AfCS ID	Experiment ⁴			
						PY1	PY2	PT1	PT2
Lamin B1	6.30E-10	6	GI:6754556				•	•	
Malate dehydrogenase	3.10E-11	3	GI:6678918			•			
MAP2 RNA trans-acting protein MARTA1	2.60E-14	5	GI:19424312					•	•
Matrin 3	6.00E-14	8	GI:6754650					•	
Minichromosome maintenance protein 6	3.60E-03	3	GI:6678832						•
Minichromosome maintenance protein 7	8.50E-04	4	GI:10242373				•		
Moesin	3.30E-27	11	GI:462608	PMID:10751793	A001556	•	•		
MYB binding protein	7.50E-33	9	GI:7949086				•		
Myosin heavy chain II-A, nonmuscle	4.40E-67	28	GI:17978023				•		•
NEDD-4 protein	2.40E-19	9	GI:1709250		A001622			•	
Nuclear factor kappa B2; Nfkb2	7.70E-10	3	GI:9506921		A002936			•	
Nucleolin	4.50E-12	4	GI:7106377	PMID:11207269		•			
Nucleophosmin	7.90E-04	3	GI:6679108		A001676	•	•		
Nucleosome assembly protein 1	3.80E-09	3	GI:7657357				•		
Peptidylprolyl isomerase A; Cyclophilin A	1.40E-07	3	GI:6679439		A000735	•			
Phosphoglycerate dehydrogenase	2.90E-06	3	GI:3122875				•		
Phosphoglycerate kinase	1.80E-14	5	GI:20844750			•	•		
Phospholipase C, gamma 2	8.40E-21	6	GI:18044613	PMID:9697839	A001810			•	
Plastin 2	2.20E-24	7	GI:18605749			•	•		
Profilin 1	3.20E-12	5	GI:6755040	PMID:9013885	A001898	•			
Proteasome activator complex subunit 2	1.50E-07	2	GI:17380257			•			

Name ¹	Expect Value ²	No Pept ³	Protein GI Number	Tyr Phos Ref	AfCS ID	Experiment ⁴			
						PY1	PY2	PT1	PT2
Protein disulfide isomerase A4	3.90E-19	10	GI:119531	PMID:8631326		●	●		
Pyruvate kinase 3	1.30E-38	12	GI:6755074	PMID:2462512	A001955	●	●		
Ribosomal protein S16	2.30E-07	4	GI:7305445			●			
Ribosomal protein S26	2.00E-06	3	GI:7305447			●			
RNA binding motif protein 5	7.30E-13	8	GI:15528488					●	
RNA binding motif protein 10	2.60E-12	4	GI:13435594						●
RNA helicase-related protein	2.60E-11	6	GI:12841589					●	●
RNA polymerase II-1	2.20E-19	15	GI:6677795				●		●
SEC24-related protein C (human)	8.80E-18	8	GI:17511944						●
Serine hydroxymethyltransferase	1.30E-05	3	GI:12849044				●		
SET translocation protein	1.60E-12	5	GI:20964023		A003113		●		
SMARCA4 isoform 2 (human)	4.50E-07	4	GI:10946129						●
Splicing factor 3b, subunit 1	4.60E-20	6	GI:14042921					●	●
Src associated in mitosis	2.60E-18	8	GI:12805185	PMID:7799925			●	●	●
Suppressor of Ty6 homolog	9.70E-07	6	GI:6678183						●
Syk	4.10E-09	4	GI:6755706	PMID:9208937	A000040		●		●
SYNCRIP; NS1-associated protein	2.00E-65	21	GI:6576815	PMID:11994298		●	●	●	●
TBP-interacting protein 120A (human)	7.20E-10	7	GI:17474728						●
Transcription factor TFII-I	8.40E-16	8	GI:17223644	PMID:11313464				●	●
Transketolase	1.90E-15	7	GI:11066098			●	●		
Tubulin, alpha 1	1.20E-13	7	GI:12805487	PMID:10862713	A002335		●	●	

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						PY1	PY2	PT1	PT2
Tubulin, alpha 6	2.20E-24	9	GI:6678469	PMID:10862713	A002339	●	●		
Tubulin, beta 5	1.30E-30	11	GI:7106439	PMID:10862713	A002343	●	●		
Tumor rejection antigen gp96	7.70E-33	16	GI:6755863		A000645	●	●		
Ubiquitin c-terminal hydrolase	2.60E-03	3	GI:13938036						●
Valosin containing protein	1.60E-111	42	GI:6678559	PMID:8157674		●		●	●
Villin 2	6.40E-10	4	GI:6678571	PMID:11500485	A000892	●			
Vinculin	6.80E-07	5	GI:14250200	PMID:6263485	A002366		●		
Unknown protein for GI:26345482	4.50E-09	3	GI:26345482				●		
Unknown protein for IMAGE:4920887	7.10E-13	5	GI:23272966				●		
Unknown protein for RIKEN cDNA 2700043D08	6.30E-10	6	GI:13435984				●		
Unknown protein for IMAGE:3483627	2.20E-09	4	GI:13096866					●	
Unknown protein for RIKEN cDNA 1300019H17	4.70E-06	3	GI:13195612					●	
Unknown protein for GI:19353209, similar to rat TRG protein	7.30E-11	7	GI:19353209						●
Unknown protein for GI:14917061 (human)	1.60E-03	3	GI:14917061						●
Unknown protein for GI:770621 (human)	1.40E-18	11	GI:770621						●
Unknown protein for RIKEN cDNA 1200017A24	1.60E-07	3	GI:13386352						●

¹This field lists the name associated with the database entry corresponding to the protein identified by the GI number in column 4. Except where indicated by parentheses, all names and GI numbers refer to mouse sequences.

²This field lists the Expectation Value calculated by the Sonar MS/MS search engine. This value is similar to the Expect Score derived by the BLAST search algorithm. The value shown is the combined expectation score calculated for the entire collection of peptides that match the sequence. The value represents the number of matches expected if the matches were completely random. For example, an expectation value of 1 means that at least one random match would be expected, even if the database did not include the protein sequence corresponding to the MS data. The lower the expectation score, the less likely the match would occur by chance. In order to be included in the list, the MS data had to match at least two peptides from the identified

protein with a combined expectation score $<1 \times 10^{-6}$ or match at least three peptides with a combined expectation score $<1 \times 10^{-3}$. If a protein was matched in more than one experiment, the expectation score from the best match is listed. The highest confidence matches are those where at least five peptides were matched.

³This field lists the number of peptides that matched to the MS data. If a protein was matched in more than one experiment, this number corresponds to the match with the lowest expectation score.

⁴The experiments in which a protein was identified are indicated by dots. Four independent experiments were performed, two with anti-phosphotyrosine antibody PY100 (PY1 and PY2) and two with anti-phosphotyrosine antibody PT-66 (PT1 and PT2).