

Table S16-Average Metastatic Tumors

Supplementary Table S16						
Average Relative Protein Abundance: Metastatic Tumors (Samples UM19, UM21, UM24, UM25, UM30)						
[All Proteins Quantified > 100, Log2(Ratio) Protein Ratio < 0.11, Log2(Ratio) Protein Ratio > 0.11]						
UniProt Accession	Protein	Sample Frequency n = # total	Ratio UM/Control	SEM	p value	
P62937	Peptidyl-prolyl cis-trans isomerase A	5	8.11	0.042	1.3E-05	
P09413	Fatty acid-binding protein, heart	3	4.91	0.193	1.4E-02	
P11706	High mobility group protein HMG-1/HMG-Y	4	4.70	0.369	2.1E-02	
P23381	Tryptophan-tRNA ligase, cytoplasmic	5	4.42	0.151	6.0E-04	
P07108	Acyl-CoA-binding protein	3	4.23	0.041	8.2E-04	
F78417	Citrate synthase 2	5	4.16	0.060	1.6E-05	
P06454	Prothymosin alpha	4	4.15	0.000	1.6E-04	
P02768	Serum albumin	4	4.05	0.225	4.6E-03	
075368	SH3 domain-binding glutamic acid-rich-like protein	4	4.04	0.144	2.3E-03	
I41656	Glyceraldehyde-3-phosphate dehydrogenase, testis-specific	4	3.99	0.240	1.0E-02	
P19109	Bifunctional purine biosynthetic protein PURH	4	3.98	0.241	1.1E-02	
P30043	Flavin reductase (NADPH)	4	3.78	0.080	4.8E-04	
P52566	Rho GDP-dissociation inhibitor 2	4	3.74	0.021	2.0E-02	
P09695	Beta-hexosaminidase subunit alpha	4	3.71	0.143	0.7E-03	
081008	Phospholipase D3	4	3.64	0.122	1.8E-03	
P62241	Eukaryotic translation initiation factor 5A-1	5	3.58	0.122	4.6E-04	
P00559	Phosphoglycerate kinase 1	5	3.46	0.043	8.5E-06	
000796	Sorbitol dehydrogenase	5	3.33	0.137	9.4E-04	
P31146	Coronin-1A	4	3.31	0.222	1.6E-02	
Q9UBRC	Cathepsin Z	3	3.28	0.067	3.1E-03	
P40925	Malate dehydrogenase, cytoplasmic	4	3.20	0.118	2.2E-03	
Q9Y252	Luminal cristallin homolog	4	3.19	0.226	1.4E-02	
P23528	Cofilin-1	5	3.11	0.051	2.4E-05	
P06733	Alpha-enolase	5	3.09	0.135	1.1E-03	
P07737	Protein-1	5	3.07	0.162	0.3E-03	
P12955	Xaa-Pro dipeptidase	4	3.06	0.152	5.2E-03	
P06306	Phosphatylethanolamine-binding protein 1	5	3.06	0.288	1.9E-02	
P01714	Triosephosphate isomerase	5	3.05	0.108	8.0E-04	
P61088	Ubiquitin-conjugating enzyme E2 N	3	3.02	0.067	3.7E-03	
P07698	Beta-hexosaminidase subunit beta	4	3.02	0.147	4.6E-03	
Q14665	Fascin	4	3.00	0.080	8.3E-04	
075347	Tubulin-specific chaperone A	3	2.95	0.149	1.9E-02	
Q96286	mTOSpp1 diphosphatase	4	2.93	0.143	3.9E-03	
P02787	Serotransferrin	5	2.91	0.207	6.6E-03	
P40121	Macrophage-capping protein	3	2.88	0.110	1.1E-02	
P18401	Histone H1.5	5	2.88	0.250	3.9E-02	
Q99497	Protein DJ-1	5	2.88	0.190	5.1E-03	
I15400	Syntaxin-7	4	2.88	0.215	1.6E-02	
Q10105	Protein SET	4	2.79	0.144	1.6E-02	
Q65338	6-phosphogluconolactonase	4	2.78	0.093	1.6E-03	
P19299	Thioredoxin	5	2.78	0.251	1.5E-02	
P23239	Adenosinephosphorylase	5	2.78	0.069	1.2E-04	
P29401	Transketolase	5	2.78	0.108	7.1E-04	
P52565	Rho GDP-dissociation inhibitor 1	5	2.76	0.124	1.2E-03	
P04405	Glyceraldehyde-3-phosphate dehydrogenase	5	2.74	0.052	4.3E-05	
P57729	Ras-related protein Rab-38	4	2.73	0.138	5.4E-03	
P15531	Nucleoside diphosphate kinase A	5	2.73	0.158	3.2E-03	
P08758	Annexin A5	5	2.72	0.043	2.0E-05	
P13693	Transcriptionally-controlled tumor protein	3	2.70	0.128	1.6E-02	
P19338	Nucleolin	5	2.70	0.151	2.9E-03	
Q9Y2X3	Nucleolar protein 58	5	2.68	0.082	2.8E-04	
P22067	mRNA 2'-O-methyltransferase fibrillarin	5	2.67	0.100	5.9E-04	
P00295	Rap GTP dissociation inhibitor beta	4	2.66	0.154	7.6E-03	
Q96RA2	Thioredoxin domain-containing protein 17	3	2.64	0.134	1.9E-02	
P11706	Alcohol dehydrogenase class-3	5	2.64	0.129	1.7E-03	
P13796	Fascin-2	4	2.62	0.177	1.2E-02	
P06748	Nucleophosmin	5	2.60	0.128	1.7E-03	
P16070	CD44 antigen	5	2.58	0.141	2.5E-03	
P04080	Cystatin B	5	2.57	0.107	9.1E-04	
P20042	Eukaryotic translation initiation factor 2 subunit 2	4	2.56	0.103	2.8E-03	
P07195	L-lactate dehydrogenase B chain	4	2.55	0.223	1.4E-02	
P51858	Hepatitis B virus core protein	3	2.55	0.130	1.9E-02	
Q55166	Programmed cell death protein 4	3	2.50	0.076	6.9E-03	
P07741	Adenosine phosphoribosyltransferase	4	2.49	0.100	2.7E-03	
P85846	Myotrophin	3	2.46	0.085	8.7E-03	
P18152	Carbonyl reductase [NADPH] 1	5	2.45	0.139	2.9E-03	
Q00760	Lactoyglutathione lyase	4	2.45	0.091	2.6E-03	
Q22234	Multifunctional protein ADE2	4	2.44	0.073	1.2E-03	
P11900	Cardiolipin OMT activator	3	2.38	0.129	2.1E-02	
P63104	14-3-3 protein zeta/delta	5	2.37	0.116	1.6E-03	
P06744	Glucose-6-phosphate isomerase	5	2.37	0.187	9.9E-03	
Q40967	Melanocyte protein PMEL	3	2.36	0.154	3.1E-02	
P33121	Long-chain-fatty-acyl-CoA ligase 1	4	2.35	0.145	9.7E-03	
Q9HG55	Probable serine carboxypeptidase CPVL	3	2.35	0.138	2.9E-02	
P13948	Stress-induced phosphoprotein 1	5	2.33	0.080	4.6E-04	
P07858	Cathepsin B	5	2.31	0.204	1.5E-02	
P66842	Eukaryotic initiation factor 4A-1	5	2.30	0.078	4.3E-04	
Q14816	Proteasome subunit alpha type-7	3	2.30	0.151	1.2E-02	
P07900	Heat shock protein HSP 90-alpha	5	2.29	0.058	1.4E-04	
Q13838	Sylcozyme RNAse Hcase 5D/59B	5	2.27	0.114	1.9E-03	
Q13185	Chromobox protein homolog 3	5	2.26	0.179	1.0E-02	
Q13510	Acid ceramidase	5	2.25	0.220	2.1E-02	
P15121	Aldehyde reductase	4	2.23	0.098	4.0E-03	
P07339	Cathepsin D	5	2.18	0.091	1.0E-03	
P14818	Pyruvate kinase PKM	5	2.16	0.110	2.2E-03	
P14774	Macrophage migration inhibitory factor	1	8.66	NA	NA	
Q80E05	Apolipoprotein L2	1	7.90	NA	NA	
P27169	Serum paraoxonase/arylesterase 1	1	7.23	NA	NA	
Q8L141	Paraneoplastic antigen Mac3	1	6.85	NA	NA	
Q9UJ08	Ena/VASP-like protein	1	5.93	NA	NA	
P06702	Protein S100-A9	1	5.75	NA	NA	
P13686	Tartate-resistant acid phosphatase type 5	1	5.06	NA	NA	
Q55N78	WASH complex subunit FAM21B	1	4.95	NA	NA	
Q05919	Antigen peptide transporter 2	1	4.86	NA	NA	
P23435	Interferon-induced guanylate-binding protein 1	1	4.78	NA	NA	
P18463	HLA class I histocompatibility antigen, B-27 alpha chain	1	4.78	NA	NA	
P52769	IMP2-like protein 1	1	4.76	NA	NA	
P48663	Granzyme K	1	4.36	NA	NA	
P27895	DNA (apurinic or arymidinic site) lyase	2	4.29	NA	NA	
P08273	High affinity immunoglobulin epsilon receptor subunit gamma	1	4.18	NA	NA	
Q00625	Pinin	2	4.14	NA	NA	
P05109	Protein S100-A8	1	4.05	NA	NA	
P56655	Neurophil defensin 1	1	4.03	NA	NA	
P43652	Alamin	1	4.01	NA	NA	
Q96948	Probable rRNA-processing protein EBP2	1	3.96	NA	NA	
P09801	Heme oxygenase 1	1	3.78	NA	NA	
Q96203	Phosphoglucomutase-2	1	3.68	NA	NA	
Q13637	Ras-related protein Rab-32	1	3.67	NA	NA	
P17213	Bactericidal permeability-increasing protein	1	3.63	NA	NA	
Q9NRV9	Heme-binding protein 1	2	3.62	NA	NA	
Q9N1E3	Nuclear ubiquitin casein and cyclin-dependent kinase substrate 1	2	3.58	NA	NA	
P24158	Myotubularin	1	3.40	NA	NA	
O18189	Ubiquitin-conjugating enzyme E2 variant 2	2	3.39	NA	NA	
Q80170	Serine/threonine-rich splicing factor 4	1	3.34	NA	NA	
P33085	UMP-CMP kinase	2	3.23	NA	NA	
P18586	N-acetylglucosamine-6-sulfatase	2	3.23	NA	NA	
Q90115	Cationic aminopropylase 1	2	3.18	NA	NA	
P04439	HLA class I histocompatibility antigen, A-3 alpha chain	1	3.18	NA	NA	
P66534	HLA class I histocompatibility antigen, A-24 alpha chain	1	3.17	NA	NA	
P62310	UB-protein-associated Ctn-like protein L5n3	1	3.17	NA	NA	
Q03518	Antigen peptide transporter 1	1	3.16	NA	NA	
P41218	Myosid cell nuclear differentiation antigen	1	3.06	NA	NA	
Q8WMM9	Cytoglobin	2	3.03	NA	NA	
Q98XK5	Bcl-2-like protein 1D	1	2.99	NA	NA	
Q69VJ8	U3 small nuclear RNA-associated protein 14 homolog A	1	2.94	NA	NA	
P18930	Fumarylacetoacetase	2	2.93	NA	NA	
O15347	High mobility group protein B3	1	2.90	NA	NA	
O15533	Tapasin	2	2.89	NA	NA	
P87809	Nuclease-sensitive element-binding protein 1	1	2.85	NA	NA	
P09695	LeuKylifene A-4 hydrolase	1	2.83	NA	NA	
Q00115	Deoxyribonuclease-2-alpha	1	2.78	NA	NA	
O13428	Teacup protein	2	2.77	NA	NA	
Q9U290	Proliferation-associated protein 2G4	1	2.72	NA	NA	
P10253	Lysosomal alpha-glucosidase	1	2.72	NA	NA	
Q9JHL4	Dipeptidyl peptidase 2	2	2.67	NA	NA	
O15348	V-type proton ATPase subunit G1	1	2.62	NA	NA	
O15943	NEED8	2	2.55	NA	NA	
Q99729	Heterogeneous nuclear ribonucleoprotein A/B	2	2.53	NA	NA	
P38337	Aldehyde dehydrogenase X, mitochondrial	3	2.51	0.217	0.051	
P04233	HLA class II histocompatibility antigen gamma chain	1	2.50	NA	NA	
Q96706	Melanophilin	3	2.48	0.438	0.173	
P23586	Eukaryotic translation initiation factor 4B	1	2.46	NA	NA	
O14378	UDP-glucose 4-epimerase	1	2.48	NA	NA	
P20702	Integrin alpha-X	1	2.48	NA	NA	
Q3LXA3	Bifunctional ATP-dependent dihydroxyacetone kinase/FAD-lyase (cyclizing)	1	2.47	NA	NA	
P55008	Allograft inflammatory factor 1	2	2.46	NA	NA	
P06236	Beta-glucuronidase	2	2.46	NA	NA	
Q96UPO	EF-hand domain-containing protein D1	1	2.44	NA	NA	
P04043	Serpin B9	1	2.43	NA	NA	
P02796	Transferin receptor protein 1	1	2.43	NA	NA	
P02792	Ferritin light chain	1	2.43	NA	NA	
Q9UJ46	Proteasome activator complex subunit 2	3	2.43	0.364	0.136	
P56346	Neurophil elastase	1	2.42	NA	NA	
Q15181	Inorganic pyrophosphatase	3	2.41	0.352	0.138	
Q9Y106	Ubiquitin-fold modifier-conjugating enzyme 1	1	2.40	NA	NA	
Q61896	LM domain acid-binding protein 1	1	2.38	NA	NA	
P19871	Thymidine phosphorylase	3	2.38	0.405	0.204	
P51688	N-sulphoglucosamine sulphohydrolase	1	2.38	NA	NA	
P61918	Epididymal secretory protein E1	1	2.38	NA	NA	
Q03154	Aminopyruvate-1	1	2.37	NA	NA	
P28491	Cyclin-dependent kinase 2	1	2.35	NA	NA	
Q63HND	E3 ubiquitin-protein ligase RNF213	1	2.35	NA	NA	
Q9Y133	Dipeptidyl peptidase 3	1	2.34	NA	NA	
Q13573	SNW domain-containing protein 1	1	2.34	NA	NA	
P02765	Alpha-2-HS-glycoprotein	4	2.34	0.383	0.113	
P10219	Lysosomal protective protein	1	2.33	NA	NA	
Q13303	Voltage-gated potassium channel subunit beta-2	1	2.31	NA	NA	
P28065	Proteasome subunit beta type-9	1	2.31	NA	NA	
P07093	Glia-derived neuron	3	2.30	0.211	0.059	
P14550	Alcohol dehydrogenase [NAD(P)]	3	2.30	0.203	0.054	
P01620	Ig kappa chain V8H region SIE	1	2.30	NA	NA	
Q8LW89	Transmembrane protein 205	1	2.29	NA	NA	
P05155	Plasma protease C1 inhibitor	2	2.28	NA	NA	
Q9P9U2	Neutral cholesterol ester hydrolase 1	1	2.28	NA	NA	
P19426	Annexin A3	1	2.25	NA	NA	
Q13442	28 kDa heat- and acid-stable phosphoprotein	2	2.23	NA	NA	
P10412	Histone H1.4	1	2.22	NA	NA	
P10721	Maststem cell growth factor receptor Kit	1	2.22	NA	NA	
P18188	HLA class I histocompatibility antigen, A-30 alpha chain	1	2.22	NA	NA	
P48537	Glutathione synthetase	1	2.21	NA	NA	

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Q6Y14	Peptidyl-prolyl cis-trans isomerase FKBP11	2	2.21	NA	NA
P81173	60S ribosomal protein L38	1	2.20	NA	NA
Q9Y112	WAC4 (ribonucleoprotein complex subunit 1)	1	2.20	NA	NA
O68A00	Dehydrogenase/reductase SDR family member 7B	1	2.20	NA	NA
Q52020	Gamma-glutamyl hydrolase	2	2.19	NA	NA
Q13435	Splicing factor 3B subunit 2	2	2.17	NA	NA
Q43776	Asparagine-RNA ligase, cytoplasmic	2	2.17	NA	NA
P04440	HLA class II histocompatibility antigen, DP beta 1 chain	2	2.16	NA	NA
PE2828	GTP-binding nuclear protein Ran	5	2.15	0.097	0.001
Q13576	Pas GTPase-activating-like protein IQGAP2	1	2.15	NA	NA
P00751	Complement factor B	1	2.14	NA	NA
P13639	Elongation factor 2	5	2.13	0.129	0.004
P52015	36S ribosomal protein L12, mitochondrial	2	2.13	NA	NA
P03044	Pterostedatin 5, mitochondrial	2	2.12	0.076	0.001
P20618	Proteasome subunit beta type-1	4	2.12	0.136	0.012
Q9P405	Muscleblind-like protein 1	1	2.10	NA	NA
P11215	Integrin alpha-M	1	2.10	NA	NA
P52029	6-phosphogluconate dehydrogenase, decarboxylating	1	2.09	NA	NA
Q06688	Acidic leucine-rich nuclear phosphoprotein 32 family member B	5	2.09	0.081	0.001
O86UO7	Fermitin family homology 3	2	2.08	NA	NA
O59K94	Cytosolic non-specific dipeptidase	4	2.08	0.157	0.019
A40196	WD repeat-containing protein 91	2	2.08	NA	NA
P13797	Plastin-3	4	2.07	0.126	0.010
O6S380	Galectin-3-binding protein	4	2.07	0.145	0.016
Q13243	Serine/arginine-rich splicing factor 5	4	2.07	NA	NA
Q42224	Signal transducer and activator of transcription 1-alpha/beta	3	2.06	0.390	0.206
Q12906	Interleukin enhancer-binding factor 3	5	2.05	0.030	0.000
P52069	Activated RNA polymerase II transcriptional coactivator p15	3	2.05	0.066	0.008
O96D65	Regulator of microtubule dynamics protein 1	1	2.05	NA	NA
O13371	Eukaryotic translation initiation factor 3 subunit D	1	2.04	NA	NA
P21599	Cytoplasmic aspartate hydratase	1	2.03	NA	NA
P36871	Phosphoglucomutase-1	2	2.03	NA	NA
Q9C930	Putative 40S ribosomal protein S10-like	5	2.02	NA	NA
P25788	Proteasome subunit alpha type-3	4	2.02	0.134	0.013
Q99253	Sirtuin	3	2.02	0.237	0.097
Q02725	Mitochondrial fission factor	2	2.02	NA	NA
O75874	Isocitrate dehydrogenase [NADP] cytoplasmic	2	2.02	NA	NA
P45588	Alanine-RNA ligase, cytoplasmic	1	2.01	NA	NA
PE2750	60S ribosomal protein L26a	4	2.01	0.198	0.039
P52786	Proteasome subunit alpha type-1	5	2.01	0.191	0.022
Q00154	Cytosolic acyl coenzyme A thioester hydrolase	3	2.01	0.063	0.014
PE2857	40S ribosomal protein S28	2	2.00	NA	NA
Q00338	L-lactate dehydrogenase A chain	5	2.00	0.195	0.024
Q14978	Nucleolar and coiled-body phosphoprotein 1	1	1.99	NA	NA
Q02763	Alpha-1-acid glycoprotein 1	3	1.99	0.480	0.289
PE4077	ADP-ribosylation factor 1	3	1.99	0.224	0.052
P48973	Chromobox protein homolog 5	5	1.98	NA	NA
PE8238	Heat shock protein HSP 90-beta	5	1.97	0.125	0.006
P13489	Ribonuclease inhibitor	2	1.97	NA	NA
Q07855	Serine/arginine-rich splicing factor 1	5	1.96	0.134	0.007
P00734	Prothrombin	2	1.96	NA	NA
PE2158	Calmodulin	5	1.96	0.111	0.004
O14561	Axyl carrier protein, mitochondrial	1	1.95	NA	NA
Q01130	Serine/arginine-rich splicing factor 2	2	1.94	NA	NA
O68841	Eukaryotic translation initiation factor 5B	1	1.94	NA	NA
Q9UKV3	Apoptotic chromatin condensation inducer in the nucleus	2	1.94	NA	NA
P54819	Adenylate kinase 2, mitochondrial	4	1.93	0.106	0.008
Q12931	Heat shock protein 75 Da, mitochondrial	1	1.94	NA	NA
P13760	HLA class II histocompatibility antigen, DRB1-4 beta chain	1	1.92	NA	NA
Q00323	Proteasome activator complex subunit 1	5	1.92	0.194	0.028
Q01291	Thyroid hormone receptor-associated protein 3	3	1.92	NA	NA
P48778	60S ribosomal protein L27a	3	1.91	0.059	0.008
P28506	Proteasome subunit alpha type-5	4	1.91	0.231	0.068
P49029	Maize dehydrogenase, mitochondrial	5	1.91	0.192	0.028
O70883	WD repeat-containing protein 1	5	1.91	0.084	0.002
Q9H111	UDP-glucose 4-epimerase	1	1.91	NA	NA
P55809	Succinyl-CoA:3-ketoacid coenzyme A transferase 1, mitochondrial	3	1.90	0.173	0.066
Q00900	Proteasome subunit alpha type-6	3	1.90	0.101	0.024
P00M83	Protein SITS3P	2	1.90	NA	NA
Q9HC38	Glyoxalase domain-containing protein 4	2	1.89	NA	NA
PE2766	Transferrin	2	1.89	NA	NA
P19102	Transferrin-2	3	1.88	0.037	0.003
Q8N183	Mimilin, mitochondrial	1	1.88	NA	NA
O66385	CKII regulatory subunit-associated protein 3	1	1.88	NA	NA
P29338	Cytosol aminopeptidase	1	1.87	0.267	0.105
P48773	Histidine triad nucleotide-binding protein 1	3	1.87	0.317	0.187
P68670	Vimentin	5	1.87	0.282	0.061
PE3279	SUMO-conjugating enzyme UBC9	2	1.87	NA	NA
Q9H911	DnaJ homolog subfamily C member 11	1	1.86	NA	NA
P36867	Acidic leucine-rich nuclear phosphoprotein 32 family member A	1	1.86	0.137	0.020
P35288	60S ribosomal protein L22	1	1.86	NA	NA
P07854	Fumarate hydratase, mitochondrial	2	1.85	NA	NA
P13737	Transaldolase	5	1.85	0.066	0.001
Q8Z025	Selenoprotein H	2	1.84	NA	NA
Q33769	Mitochondrial 10-formyltetrahydrofolate dehydrogenase	2	1.84	NA	NA
Q96241	Thiosulfonate-related transmembrane protein 1	1	1.83	NA	NA
O00299	Chloride intracellular channel protein 1	4	1.83	0.079	0.005
P38955	Pigment epithelium-derived factor	3	1.83	0.313	0.183
P01889	HLA class I histocompatibility antigen, B*7 alpha chain	1	1.83	NA	NA
P36504	HLA class I histocompatibility antigen, Cw*4 alpha chain	1	1.82	NA	NA
P07602	Prospasin	5	1.81	0.150	0.010
Q7Z7H5	Transmembrane emp24 domain-containing protein 4	1	1.81	NA	NA
O8M251	Plasminogen activator inhibitor 1 RNA-binding protein	3	1.81	0.121	0.039
P12929	Beta-enkephalin	1	1.81	NA	NA
Q76351	Vacuolar protein sorting-associated protein 4B	1	1.80	NA	NA
P07910	Heterogeneous nuclear ribonucleoproteins C1/C2	5	1.80	0.071	0.001
Q06A86	Protein VAC4 homolog	2	1.80	NA	NA
Q96538	Leguman	1	1.79	NA	NA
O66424	Leucine-rich repeat-containing protein 59	4	1.79	0.119	0.016
P24821	Tetraspan	1	1.78	NA	NA
P52786	Puromycin-sensitive aminopeptidase	4	1.78	0.054	0.003
P12004	Proliferating cell nuclear antigen	1	1.77	NA	NA
O00907	Nucleolar protein 56	3	1.77	0.185	0.091
P43243	Matrin-3	3	1.76	0.063	0.012
O15007	Ras-related protein Rab-11B	5	1.75	0.115	0.028
PE1204	ADP-ribosylation factor 3	2	1.75	NA	NA
O15631	Translin	3	1.75	0.047	0.007
PE2811	Glutathione S-transferase P	5	1.74	0.156	0.024
P21796	Voltage-dependent anion-selective channel protein 1	5	1.74	0.160	0.025
Q43399	Tumor protein D54	3	1.74	0.056	0.010
Q00341	Myosin	1	1.74	NA	NA
P30040	Endoplasmic reticulum resident protein 29	3	1.73	0.335	0.242
Q9Y496	AFCS-like protein 2	5	1.73	0.084	0.003
P36543	V-type proton ATPase subunit E 1	5	1.73	0.143	0.019
PE6753	Topomycin alpha-3 chain	5	1.72	0.191	0.047
Q00160	Unconventional myosin-III	2	1.72	NA	NA
P05990	Apolipoprotein D	1	1.72	NA	NA
P05141	ADP/ATP translocase 2	4	1.71	0.062	0.003
Q00688	Peptidyl-prolyl cis-trans isomerase FKBP3	2	1.71	NA	NA
P22314	Ubiquitin-like modifier-activating enzyme 1	5	1.70	0.085	0.003
O68225	Apoptosis inhibitor 5	4	1.70	0.065	0.004
P28446	Isovaleryl-CoA dehydrogenase, mitochondrial	1	1.70	NA	NA
PE6737	Glycogen phosphorylase, liver form	5	1.70	0.394	0.249
P48426	Phosphatidylinositol 5-phosphate 4-kinase type-2 alpha	3	1.70	0.178	0.096
PE6874	Cytochrome c1, heme protein, mitochondrial	5	1.70	0.237	0.111
Q18629	Serine/arginine-rich splicing factor 7	2	1.70	NA	NA
O8M474	Alpha-beta hydrolase domain-containing protein 11	1	1.70	NA	NA
P00441	Superoxide dismutase [Cu-Zn]	3	1.70	0.171	0.091
P99999	Cytochrome c	5	1.69	0.216	0.071
P10155	60 kDa SIA-Ribonucleoprotein	1	1.69	NA	NA
Q12905	Interleukin enhancer-binding factor 2	5	1.69	0.051	0.001
Q9J922	Inorganic pyrophosphatase 2, mitochondrial	4	1.68	0.123	0.024
P49792	E3 SUMO-protein ligase RanBP2	1	1.65	NA	NA
Q9Y203	Glutathione S-transferase kappa 1	4	1.68	0.231	0.111
PE6847	40S ribosomal protein S24	1	1.67	NA	NA
P90195	4F2 cell-surface antigen heavy chain	1	1.67	0.100	0.017
Q07960	Rho GTPase-activating protein 1	5	1.67	0.132	0.018
Q549X3	Presenquence protease, mitochondrial	3	1.66	0.062	0.010
Q14103	Heterogeneous nuclear ribonucleoprotein D0	5	1.66	0.141	0.023
O78822	Eukaryotic translation initiation factor 3 subunit J	1	1.66	NA	NA
O14737	Programmed cell death protein 5	1	1.65	NA	NA
O00560	Syntenin-1	2	1.65	NA	NA
O76021	Ribosomal L1 domain-containing protein 1	3	1.65	0.159	0.088
Q83A03	Putative peptidyl-RNA hydrolase PTPRD1	1	1.65	NA	NA
P46783	40S ribosomal protein S10	2	1.65	NA	NA
O68945	FACT complex subunit SSRP1	2	1.64	NA	NA
Q13423	NAD(P)+ dehydrogenase, mitochondrial	5	1.64	0.088	0.005
P23284	Peptidyl-prolyl cis-trans isomerase B	5	1.64	0.086	0.004
P56387	60S acidic ribosomal protein P2	5	1.64	0.163	0.039
P91769	Beta-2-microglobulin	3	1.63	0.225	0.161
O00839	Heterogeneous nuclear ribonucleoprotein U	5	1.63	0.120	0.015
Q96C19	EF-hand domain-containing protein D2	3	1.63	0.107	0.045
P16402	Histone H1.3	1	1.63	NA	NA
O8YV72	Protein ANNA2	4	1.62	0.253	0.152
Q13547	Histone deacetylase 1	1	1.62	NA	NA
Q95182	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 7	1	1.62	NA	NA
Q02818	Nucleobindin-1	4	1.62	0.025	0.000
P98426	High mobility group protein B1	1	1.62	0.188	0.064
Q14979	Heterogeneous nuclear ribonucleoprotein D-like	3	1.61	0.100	0.041
P68641	Elongation factor 1-gamma	5	1.61	0.097	0.008
P68621	U1 small nuclear ribonucleoprotein 70 kDa	1	1.60	NA	NA
O06787	Fragile X mental retardation protein 1	3	1.60	0.154	0.104
P38651	Heterogeneous nuclear ribonucleoprotein A1	5	1.60	0.055	0.001
PE2241	40S ribosomal protein S8	4	1.60	0.096	0.016
O15424	Scaffold attachment factor B1	1	1.59	NA	NA
P01034	Cystatin C	1	1.59	NA	NA
PE2790	Hempepin	5	1.58	0.223	0.109
P18669	Phosphoglycerate mutase 1	5	1.58	0.165	0.050
Q15083	Perisatin	3	1.58	0.207	0.263
P35659	Protein DEK	1	1.58	NA	NA
Q13263	Transcription intermediary factor 1-beta	4	1.58	0.073	0.008
P30464	HLA class I histocompatibility antigen, B*15 alpha chain	1	1.57	NA	NA
O1KM03	Heterogeneous nuclear ribonucleoprotein U-like protein 2	5	1.57	0.120	0.020
O66296	Voltage-gated hydrogen channel 1	1	1.56	NA	NA
P01625	10 kDa chain VVI region Len	2	1.56	NA	NA
O9A185	Switch-associated protein 70	2	1.56	NA	NA
P25398	40S ribosomal protein S12	5	1.56	0.089	0.003
P04075	Fructose biphosphate aldolase A	2	1.55	0.039	0.000
O9Y3X3	Sorting nexin-5	2	1.55	NA	NA
P51810	G-protein coupled receptor 143	1	1.55	0.159	0.050
P51665	26S proteasome non-ATPase regulatory subunit 7	2	1.55	NA	NA
P07814	Bi-functional glutamate-proline-RNA ligase	2	1.55	NA	NA
Q06211	ATP-dependent RNA helicase A	5	1.55	0.088	0.011
P30484	HLA class I histocompatibility antigen, B-46 alpha chain	1	1.54	NA	NA
P17540	Creatine kinase S-type, mitochondrial	2	1.54	NA	NA
O43852	Calumenin	5	1.54	0.063	0.002
PE2258	14-3-3 protein epsilon	4	1.54	0.064	0.007

Table S16-Average Metastatic Tumors

Q16698	2,4-dienyl-CoA reductase, mitochondrial	5	1.53	0.081	0.006
Q26816	Transitional activator GCN1	1	1.53	NA	NA
Q73390	Citrate synthase, mitochondrial	5	1.53	0.050	0.001
P14854	Cytochrome c oxidase subunit 8B1	4	1.52	0.122	0.041
P30533	Alpha-2-macroglobin receptor-associated protein	5	1.52	0.076	0.005
Q14247	Src substrate cortactin	4	1.52	0.106	0.029
P61604	10 kDa heat shock protein, mitochondrial	5	1.51	0.278	0.211
Q27346	14-3-3 protein eta	1	1.51	0.117	0.039
P09668	Pro-cathepsin H	1	1.51	NA	NA
Q07020	60S ribosomal protein L18	2	1.51	NA	NA
P02042	Hemoglobin subunit beta	2	1.51	0.725	0.627
P31011	Protein disulfide-isomerase A3	5	1.51	0.118	0.026
P31859	Ig gamma-2 chain C region	4	1.51	0.337	0.311
Q01518	Adenyl cyclase-associated protein 1	2	1.51	NA	NA
P36748	Flap endonuclease 1	2	1.51	NA	NA
P46940	Ras GTPase-activating-like protein IQGAP1	5	1.51	0.066	0.002
P10809	60 kDa heat shock protein, mitochondrial	5	1.50	0.064	0.003
Q9Y3D0	Mitotic spindle-associated MXD complex subunit MP18	1	1.50	NA	NA
P61619	Ras-related protein Rab-2A	1	1.50	NA	NA
Q9G273	SRA stem-loop-interacting RNA-binding protein, mitochondrial	2	1.50	NA	NA
P31150	Rab GDP dissociation inhibitor alpha	1	1.50	NA	NA
Q9Y628	Mitochondrial carrier homology 2	3	1.49	0.137	0.089
P22628	Heterogeneous nuclear ribonucleoproteins A2/B1	5	1.49	0.065	0.004
P42704	Leucine-rich PPR motif-containing protein, mitochondrial	4	1.48	0.097	0.027
P31149	Ras-related protein Rab-7a	1	1.48	0.152	0.061
Q96302	Peptidyl prolyl cis-trans isomerase FKBP9	2	1.48	NA	NA
P31949	Protein S100-A11	5	1.48	0.122	0.032
Q43488	Atlastin 51 alpha-2Npde reductase member 2	2	1.48	NA	NA
Q71UM5	40S ribosomal protein S27-like	2	1.48	NA	NA
Q9Y7E3	Putative elongation factor 1-alpha-like 3	1	1.47	0.110	0.024
P46926	Glucosamine-6-phosphate isomerase 1	4	1.48	0.161	0.094
Q10904	V-type proton ATPase subunit S1	1	1.48	NA	NA
P19335	Cathepsin-1	1	1.47	NA	NA
P08697	Alpha-2-antiplasmin	1	1.47	NA	NA
P46739	Phosphatidylinositol transfer protein beta isoform	1	1.47	NA	NA
Q12171	ELAV-like protein 1	1	1.47	NA	NA
P46063	ATP-dependent DNA helicase C1	1	1.47	NA	NA
P37020	Citabathione peroxidase 1	1	1.46	NA	NA
Q96873	Protein arginine N-methyltransferase 1	2	1.46	NA	NA
P30405	Peptidyl prolyl cis-trans isomerase F, mitochondrial	2	1.46	NA	NA
P65220	40S ribosomal protein S21	1	1.46	NA	NA
P09661	U2 small nuclear ribonucleoprotein A'	1	1.46	NA	NA
Q86UE4	Protein LYRIC	4	1.45	0.139	0.074
Q86UE7	Sulfatase-modifying factor 2	3	1.45	0.272	0.202
P18621	60S ribosomal protein L17	2	1.45	0.128	0.061
P14317	Hemopoietic lineage cell-specific protein	2	1.45	NA	NA
Q9LX08	RNA-binding protein Raly	5	1.45	0.078	0.008
P62263	40S ribosomal protein S14	5	1.45	0.147	0.066
Q9P2R7	Succinyl-CoA ligase [ADP-forming] subunit beta, mitochondrial	2	1.45	NA	NA
P62361	40S ribosomal protein S25	5	1.44	0.164	0.090
P16610	Extracellular matrix protein 1	2	1.44	NA	NA
P61421	V-type proton ATPase subunit d 1	5	1.44	0.137	0.056
Q14874	Importin subunit beta 1	5	1.44	0.110	0.029
Q75533	Splicing factor SF2 subunit 1	3	1.44	0.078	0.040
Q9614	Tetranoptin-peptide repeat protein 1	1	1.44	NA	NA
Q571M5	FK506-binding protein 15	1	1.44	NA	NA
Q81955	Transmembrane protein 192	1	1.43	NA	NA
P62136	Serine-threonine-protein phosphatase PP1-alpha catalytic subunit	4	1.43	0.061	0.008
P62829	60S ribosomal protein L23	4	1.43	0.102	0.040
Q92690	Ubiquitin ligation degradation protein beta isoform	2	1.43	NA	NA
Q92692	Fer cutaneous element-binding protein 2	1	1.43	0.051	0.008
Q73380	NADH dehydrogenase [ubiquinone] iron-sulfur protein 6, mitochondrial	2	1.43	NA	NA
P54136	Arginine-tRNA ligase, cytoplasmic	5	1.43	0.117	0.038
P51159	Ras-related protein Rab-27a	3	1.43	0.073	0.040
Q99798	Acetate thioester hydrolase, mitochondrial	5	1.43	0.086	0.014
P13804	Electron transfer flavoprotein subunit alpha, mitochondrial	2	1.43	NA	NA
P52597	Heterogeneous nuclear ribonucleoprotein F	4	1.42	0.028	0.001
Q9A6Z7	Glyoxylate reductase/hydroxyypyruvate reductase	1	1.42	NA	NA
P75227	DNA-dependent protein kinase catalytic subunit	5	1.42	0.116	0.038
P11142	Heat shock cognate 71 kDa protein	5	1.42	0.049	0.002
Q967C7	Regulator of microtubule dynamics protein 3	2	1.42	NA	NA
P02746	Complement C1c subcomponent subunit B	3	1.42	NA	NA
Q49207	60S ribosomal protein L34	4	1.42	0.133	0.077
Q9Y5J7	Mitochondrial import inner membrane translocase subunit Tim9	1	1.42	NA	NA
P62081	40S ribosomal protein S7	2	1.42	NA	NA
Q9NYL2	UDP-glucose-glycoprotein glucosyltransferase 1	2	1.42	NA	NA
P07237	Protein disulfide-isomerase	5	1.42	0.089	0.025
Q06410	Importin-5	2	1.41	NA	NA
P29728	Z'-5'-oligoadenylate synthase 2	1	1.41	NA	NA
P29692	Elongation factor 1-delta	1	1.41	0.153	0.060
Q15118	Niemann-Pick C1 protein	2	1.41	NA	NA
Q97383	Putative RNA-binding protein Luc7-like 2	3	1.41	0.210	0.242
Q92598	Heat shock protein 105 kDa	1	1.41	NA	NA
Q16836	Hydroxyacyl-coenzyme A dehydrogenase, mitochondrial	3	1.41	0.097	0.071
P63731	60S ribosomal protein L24	4	1.41	0.215	0.207
Q96972	FXR coreceptor 1	3	1.41	0.385	0.465
Q14677	Cathepsin interactor 1	2	1.41	NA	NA
P36204	Enoyl-CoA hydratase, mitochondrial	4	1.41	0.033	0.002
Q96989	Succinyl-CoA ligase [GDP-forming] subunit beta, mitochondrial	1	1.41	NA	NA
Q9A6Z2	NSFL1 cofactor p47	1	1.41	NA	NA
P37108	Signal recognition particle 14 kDa protein	2	1.41	NA	NA
Q92699	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 10, mitochondrial	2	1.41	NA	NA
Q15366	Poly(C)-binding protein 2	1	1.41	NA	NA
Q97919	Cytochrome b-c1 complex subunit 6, mitochondrial	4	1.40	0.281	0.314
Q9Y2B0	Protein canopy homolog 2	1	1.40	NA	NA
Q94960	Ras-related GTP-binding protein C	1	1.40	NA	NA
P14904	NADH dehydrogenase [ubiquinone] flavoprotein 2, mitochondrial	5	1.40	NA	NA
Q13123	Protein Red	1	1.40	NA	NA
P21283	V-type proton ATPase subunit C 1	3	1.40	0.089	0.064
P21599	Polypyrimidine tract-binding protein 1	5	1.40	0.047	0.002
Q96336	Synaptic vesicle membrane protein VAMP1 homolog	5	1.40	0.174	0.127
P11627	Killer-alpha-lysin inhibitor heavy chain H1	1	1.40	NA	NA
P16219	Short-chain specific acyl-CoA dehydrogenase, mitochondrial	3	1.39	0.040	0.015
P13010	X-ray repair cross-complementing protein 5	5	1.39	0.046	0.002
Q9A9X1	Poly(I)-binding-splicing factor PUF60	4	1.39	0.070	0.019
P27144	Adenylate kinase 4, mitochondrial	1	1.39	NA	NA
P12270	Nucleoprotein TPR	4	1.38	0.068	0.018
P62140	Serine-threonine-protein phosphatase PP1-beta catalytic subunit	1	1.38	NA	NA
P21291	Cysteine and glycine-rich protein 1	1	1.38	NA	NA
Q10665	Melanoma antigen recognized by T-cells 1	1	1.37	NA	NA
Q92622	Dihydropyridyl dehydrogenase, mitochondrial	1	1.37	0.069	0.002
P14408	Cytochrome c oxidase subunit 7A2, mitochondrial	1	1.37	NA	NA
Q9A917	14-3-3 protein eta	1	1.37	NA	NA
Q13817	CuIin-2	1	1.37	NA	NA
P11137	Microtubule-associated protein 2	1	1.37	NA	NA
P05388	60S acidic ribosomal protein P0	4	1.36	0.034	0.001
Q15145	Actin-related protein 2/3 complex subunit 3	4	1.36	0.123	0.087
P51608	Methyl-CpG-binding protein 2	3	1.36	0.272	0.375
P49756	RNA-binding protein 25	1	1.36	NA	NA
Q9N063	Coiled-coil-helix-coiled-coil domain-containing protein 3, mitochondrial	4	1.36	0.063	0.016
Q07021	Complement component 1 Q subcomponent-binding protein, mitochondrial	2	1.36	NA	NA
P56206	60S ribosomal protein L16a	5	1.36	0.048	0.003
Q15046	Lysine-tRNA ligase	3	1.36	0.239	0.330
D14773	Tyrosyl-DL-peptidase 1	5	1.35	0.066	0.025
P61247	40S ribosomal protein S3a	4	1.35	0.106	0.046
Q60506	Heterogeneous nuclear ribonucleoprotein Q	4	1.35	0.095	0.050
Q9A9F1	Serine-tRNA ligase, mitochondrial	4	1.35	0.179	0.162
P19367	Hexokinase 1	5	1.35	0.185	0.179
P0CV22	40S ribosomal protein S17-like	5	1.35	0.049	0.004
P22059	Oxytetracycline-binding protein 1	2	1.35	NA	NA
Q08379	Golgin subfamily A member 2	1	1.35	NA	NA
P08685	40S ribosomal protein SA	5	1.35	0.089	0.029
P61978	Heterogeneous nuclear ribonucleoprotein K	1	1.34	0.091	0.031
Q12904	Aminoacyl-tRNA synthetase complex-interacting multifunctional protein 1	1	1.34	NA	NA
Q9Y323	Deoxyribose diphosphate triphosphohydrolase SAMHD1	4	1.34	0.224	0.281
Q9A726	RNA-binding protein 12	1	1.34	0.062	0.042
P62191	26S protease regulatory subunit 4	2	1.34	NA	NA
P15153	Ras-related C3 botulinum toxin substrate 2	2	1.34	NA	NA
Q43598	Z'-deoxyribose 5'-phosphate N-hydrolase 1	1	1.34	NA	NA
P36232	Prohibitin	5	1.34	0.190	0.200
Q9Y022	STE20-like serine/threonine protein kinase	1	1.34	NA	NA
P51991	Heterogeneous nuclear ribonucleoprotein A3	5	1.33	0.078	0.021
P43490	Nicotinamide phosphoribosyltransferase	4	1.33	0.201	0.247
Q96976	Coronin-10	4	1.33	0.144	0.138
Q16666	Gamma-interferon-inducible protein 16	2	1.33	NA	NA
Q00059	Transcription factor A, mitochondrial	3	1.33	0.304	0.447
Q90911	THO complex subunit 4	2	1.33	NA	NA
Q00483	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 4	4	1.33	0.175	0.204
P56213	Isocitrate dehydrogenase [NAD] subunit alpha, mitochondrial	5	1.33	0.085	0.030
Q9A971	ATPase family AAA domain-containing protein 3A	1	1.33	0.092	0.002
P78347	General transcription factor II-I	4	1.32	0.035	0.004
P38606	V-type proton ATPase catalytic subunit A	4	1.32	0.155	0.145
P53597	Succinyl-CoA ligase [ADP-forming] subunit alpha, mitochondrial	3	1.32	0.100	0.108
Q10488	V-type proton ATPase 116 kDa subunit a isoform 3	2	1.32	NA	NA
P12956	X-ray repair cross-complementing protein 6	4	1.32	0.059	0.002
P62979	Ubiquitin-40S ribosomal protein S27a	2	1.32	NA	NA
Q9Y3D9	26S ribosomal protein S23, mitochondrial	4	1.32	NA	NA
P49721	Proteasome subunit beta type-2	1	1.32	NA	NA
Q9Y411	Unconventional myosin-Va	4	1.32	0.092	0.058
P06675	Receptor-type tyrosine-protein phosphatase C	2	1.32	NA	NA
Q96272	WD repeat-containing protein 81	5	1.32	NA	NA
P62344	Guanine nucleotide-binding protein subunit beta 2-like 1	5	1.31	0.032	0.001
P62661	Destrin	1	1.31	0.169	0.186
Q75436	Nuclear protein sorting-associated protein 26A	1	1.31	NA	NA
P01857	Ig gamma-1 chain C region	5	1.31	0.307	0.428
Q81802S	Estradiol 17-beta-dehydrogenase 11	1	1.31	NA	NA
P53990	IST1 homolog	1	1.31	NA	NA
P41091	Eukaryotic translation initiation factor 2 subunit 3	1	1.31	NA	NA
P62330	ADP-ribosylation factor 6	1	1.31	NA	NA
Q43681	ATPase ASNA1	1	1.30	NA	NA
Q9NP24	Prefoldin subunit 4	1	1.30	NA	NA
Q14152	Eukaryotic translation initiation factor 3 subunit A	1	1.30	0.034	0.001
Q02774	Vitamin D-binding protein	5	1.30	0.354	0.496
P36846	Stress-70 protein, mitochondrial	5	1.30	0.067	0.017
P52272	Heterogeneous nuclear ribonucleoprotein M	4	1.30	0.093	0.049
P30050	60S ribosomal protein L12	3	1.30	0.115	0.152
Q96623	Prohibitin-2	5	1.29	0.184	0.256
Q9P2E5	Ribosome-binding protein 1	5	1.29	0.117	0.094
Q90669	Cytochrome c oxidase subunit 6C	3	1.29	0.089	0.086
Q51718	Toran-1A-interacting protein 1	2	1.29	NA	NA
Q96V6G	Transmembrane etp24 domain-containing protein 9	2	1.29	NA	NA
P62639	Threonine-tRNA ligase, cytoplasmic	1	1.28	NA	NA
P62246	40S ribosomal protein S16	1	1.28	0.031	0.001
Q96805	Transmembrane 9 superfamily member 2	2	1.28	NA	NA
P38159	PNA-binding motif protein, X chromosome	3	1.28	0.189	0.326
P38176	Lpx protease homolog, mitochondrial	1	1.28	NA	NA
P54552	Heat shock-related 70 kDa protein 2	5	1.27	0.129	0.133

Table S16-Average Metastatic Tumors

P2885	Peptidyl-prolyl cis-trans isomerase FKBP2	2	1.27	NA	NA
Q89YF4	Cullin-associated NEDD8-associated protein 1	5	1.27	0.070	0.034
Q94906	Pre-mRNA-processing factor 5	2	1.27	NA	NA
P59998	Actin-related protein 2/3 complex subunit 4	5	1.27	0.137	0.155
Q10225	118 kDa US small nuclear ribonucleoprotein component	5	1.27	0.352	0.284
Q9NYF8	Bcl-2-associated transcription factor 1	1	1.27	NA	NA
Q9L3V4	Coronin-1C	3	1.27	0.087	0.114
Q13998	GPCR signalingosome complex subunit 1	1	1.28	NA	NA
Q15233	Non-POU domain-containing octamer-binding protein	5	1.28	0.055	0.013
P51572	B-cell receptor-associated protein 31	5	1.28	0.133	0.155
P24534	Elongation factor 1 beta	5	1.28	0.182	0.208
P14886	Heterogeneous nuclear ribonucleoprotein L	5	1.28	0.060	0.019
Q9Y006	Leucine-rich repeat flightless-interacting protein 2	1	1.28	NA	NA
Q9H8J5	Procollagen galactosyltransferase 1	3	1.28	0.352	0.589
P34832	Heat shock 70 kDa protein A	4	1.28	0.073	0.059
P10644	GMP-dependent protein kinase type I alpha regulatory subunit	4	1.28	0.128	0.174
Q9G253	WD repeat-containing protein 61	1	1.28	NA	NA
P19823	Inter-alpha-trypsin inhibitor heavy chain H2	2	1.28	NA	NA
Q75494	Serinearginine-rich splicing factor 10	1	1.28	NA	NA
Q98874	Poly (ADP-ribose) polymerase 1	5	1.24	0.032	0.002
P30042	ES1 protein homolog, mitochondrial	4	1.24	0.219	0.396
Q90268	Histone-binding protein RBSP4	2	1.24	NA	NA
Q96WU7	Sideroflexin-3	2	1.24	NA	NA
Q15459	Splicing factor 3A subunit 1	1	1.24	NA	NA
Q00765	Receptor expression-enhancing protein 5	1	1.24	0.128	0.156
Q96202	LETM1 and EF-hand domain-containing protein 1, mitochondrial	5	1.24	0.057	0.021
Q8N263	Monooxygenolipase ABHD12	1	1.23	NA	NA
P13674	Prolyl 4-hydroxylase subunit alpha 1	3	1.23	0.088	0.140
P27635	60S ribosomal protein L10	5	1.23	0.084	0.068
Q98Y13	Peptidyl-prolyl cis-trans isomerase FKBP10	1	1.23	NA	NA
Q43809	Cleavage and polyadenylation specificity factor subunit 5	2	1.23	NA	NA
P22246	Splicing factor, proline- and glutamine-rich	5	1.23	0.082	0.063
Q73355	Mannose-6-phosphate utilization defect 1 protein	4	1.23	NA	NA
Q8N163	Cell cycle and apoptosis regulator protein 2	1	1.23	NA	NA
Q547E7	Nodal modulator 2	1	1.23	NA	NA
P40785	40S ribosomal protein S5	2	1.23	NA	NA
Q00700	HLA class I histocompatibility antigen, Cw-15 alpha chain	1	1.23	NA	NA
P58012	U1 small nuclear ribonucleoprotein A	3	1.23	0.043	0.041
Q9P016	Thymocyte nuclear protein 1	1	1.23	NA	NA
P04179	Superoxide dismutase [Mn], mitochondrial	5	1.23	0.212	0.392
P46779	60S ribosomal protein L28	2	1.22	0.044	0.045
Q94874	E3 UFM1 protein ligase 1	2	1.22	NA	NA
P61586	Transforming protein RhoA	1	1.22	NA	NA
Q96102	Heterogeneous nuclear ribonucleoprotein U-like protein 1	2	1.22	NA	NA
Q92556	Engulfment and cell motility protein 1	1	1.22	NA	NA
Q15144	Actin-related protein 2/3 complex subunit 2	5	1.22	0.159	0.221
Q95168	NADH dehydrogenase (ubiquinone) 1 beta subcomplex subunit 4	1	1.22	NA	NA
Q12874	Splicing factor 3A subunit 3	1	1.22	NA	NA
P11844	Probable ATP-dependent RNA helicase DDX5	4	1.22	0.028	0.006
Q04037	Eukaryotic translation initiation factor 4 gamma 1	4	1.22	NA	NA
P39023	60S ribosomal protein L3	5	1.22	0.052	0.019
P26368	Splicing factor U2AF 65 kDa subunit	3	1.22	0.095	0.175
Q49591	Serine--RNA ligase, cytoplasmic	5	1.22	0.068	0.046
P26040	Valine--RNA ligase	3	1.22	0.038	0.035
Q97294	Dehydrogenase/oxidoreductase SDR family member 7	2	1.21	NA	NA
Q15365	Poly(C) binding protein 1	4	1.21	0.123	0.214
P08417	Dihydropyridine reductase	2	1.21	NA	NA
P28447	Antioxidant protein A1	5	1.21	0.287	0.538
P60886	40S ribosomal protein S20	5	1.21	0.096	0.116
P14688	Aspartate--RNA ligase, cytoplasmic	5	1.21	0.086	0.090
Q10511	DNA damage-binding protein 1	1	1.21	0.102	0.158
P20810	Calpastatin	2	1.21	NA	NA
P63000	Ras-related C3 botulinum toxin substrate 1	1	1.21	0.119	0.203
Q9BTX2	Acyl-coenzyme A thioesterase 1	1	1.21	NA	NA
P53618	Coasterin subunit beta	4	1.21	0.082	0.056
Q42143	Putative pre-mRNA-splicing factor ATP-dependent RNA helicase DHX15	1	1.21	NA	NA
Q9Y266	Nuclear migration protein nudC	1	1.21	NA	NA
Q00151	POZ and LIM domain protein 1	1	1.21	NA	NA
P11216	Glycogen phosphorylase, brain form	5	1.20	0.159	0.163
P11717	Calcium-independent mannose-6-phosphate receptor	1	1.20	NA	NA
P30049	ATP synthase subunit delta, mitochondrial	5	1.20	0.111	0.170
A11070	Aminoacetate synthase-like protein	3	1.20	0.080	0.148
P50454	Serin H1	5	1.20	0.160	0.318
P46778	60S ribosomal protein L21	3	1.20	0.089	0.178
P20478	Beta-lactamase-like protein 2	1	1.20	NA	NA
Q75387	Core histone macro-H2A.1	5	1.20	0.036	0.008
Q75599	Heterotrimeric guanine-nucleotide-binding protein kinase activator A	1	1.20	NA	NA
Q13217	DnaJ homolog subfamily C member 5	2	1.20	NA	NA
P39019	40S ribosomal protein S19	5	1.19	0.222	0.488
Q26262	Antioxidant protein A1	5	1.19	0.394	0.678
Q49189	4-(methylaminobutyl)aldehyde dehydrogenase	5	1.19	0.141	0.280
Q00231	26S proteasome non-ATPase regulatory subunit 11	5	1.19	0.064	0.052
P39200	Ras-related protein Rab-1A	4	1.19	NA	NA
Q9NSD9	Phenylalanine--RNA ligase beta subunit	3	1.19	0.089	0.128
Q96KQ7	Fumarylacetoacetate hydrolase domain-containing protein 2A	2	1.19	NA	NA
Q13162	Peroxiredoxin-4	4	1.19	0.130	0.280
Q96044	Ras-related protein Rab-1B	1	1.19	NA	NA
Q15143	Actin-related protein 2/3 complex subunit 1B	4	1.19	0.149	0.334
B0NE19	Eukaryotic translation initiation factor 3 subunit C-like protein	5	1.19	0.041	0.015
Q9Y224	UPF0568 protein C14orf166	1	1.19	NA	NA
Q41619	Cytochrome b5-like B	1	1.19	NA	NA
Q8TAQ2	SWI5NF complex subunit SMARCC2	2	1.18	NA	NA
P62714	Serine/threonine-protein phosphatase 2A catalytic subunit beta isoform	1	1.18	NA	NA
Q87879	Minor histocompatibility antigen H13	1	1.18	NA	NA
P21266	Guthathione S-transferase Mu 3	4	1.18	0.152	0.354
Q00766	H1 domain-containing, RNA-binding, signal transduction-associated protein 1	4	1.18	0.065	0.065
P62913	60S ribosomal protein L11	5	1.18	0.021	0.001
P31153	S-adenosylmethionine synthase isoform type-2	4	1.18	0.205	0.482
DU6D00	Vacuolar protein sorting-associated protein 29	2	1.18	NA	NA
P22695	Cytochrome bc1 complex subunit 2, mitochondrial	5	1.18	0.158	0.364
P62910	60S ribosomal protein L32	1	1.17	NA	NA
P11586	C-1-tetrahydrofolate synthase, cytoplasmic	4	1.17	0.085	0.158
P61353	60S ribosomal protein L27	4	1.17	0.116	0.262
P52097	F-actin-capping protein subunit alpha-1	4	1.17	0.181	0.396
Q92298	NADH dehydrogenase (ubiquinone) 1 subunit C2	2	1.17	NA	NA
P17980	26S protease regulatory subunit 8A	2	1.17	NA	NA
P55145	Mesencephalic astrocyte-derived neurotrophic factor	3	1.17	0.108	0.281
P61160	Actin-related protein 2	2	1.17	0.128	0.282
Q75844	CAAX prenyl protease 1 homolog	1	1.17	NA	NA
P28161	Guthathione S-transferase Mu 2	2	1.17	NA	NA
P31195	Ras-related protein Rab-14	1	1.17	NA	NA
Q9NR28	Dialdo homolog, mitochondrial	3	1.16	0.108	0.291
P36219	Heme oxygenase 2	4	1.16	0.086	0.108
Q69526	Arsenite A4	5	1.16	0.103	0.221
Q13151	Heterogeneous nuclear ribonucleoprotein A0	5	1.16	0.113	0.257
Q90730	Eukaryotic translation initiation factor 2E	1	1.16	NA	NA
P66578	60S ribosomal protein L4	5	1.16	0.101	0.225
Q8M9K1	CGC5H iron-sulfur domain-containing protein 2	5	1.16	0.057	0.064
P06576	ATP synthase subunit beta, mitochondrial	4	1.15	0.105	0.254
Q15212	Prefoldin subunit 6	2	1.15	NA	NA
Q9L3U8	Drebrin-like protein	1	1.15	NA	NA
P62318	Small nuclear ribonucleoprotein Sm D3	4	1.15	0.069	0.100
Q49755	Transmembrane emp24 domain-containing protein 10	5	1.15	0.040	0.026
D9M242	H1ACA ribonucleoprotein domain subunit 2	2	1.15	NA	NA
P23492	Mitogen-activated protein kinase 1	1	1.15	NA	NA
Q15393	Splicing factor 3B subunit 3	2	1.15	NA	NA
P11524	60S ribosomal protein L7	5	1.14	0.028	0.059
Q68P62	RNA-binding protein 14	1	1.14	NA	NA
P26373	60S ribosomal protein L13	5	1.14	0.175	0.488
P01008	Alpha-1-antitrypsin	5	1.14	0.248	0.619
P45880	Voltage-dependent anion-selective channel protein 2	5	1.14	0.228	0.590
Q60568	Procollagen lysine 2-oxoglutarate 5-dioxygenase 3	1	1.14	NA	NA
Q10894	Protein disulfide-isomerase A6	4	1.14	0.124	0.361
Q92599	Septin-8	1	1.13	NA	NA
Q860P2	Kinecin	5	1.13	0.050	0.071
P50740	Leukocyte elastase inhibitor	2	1.13	NA	NA
P12181	V-type proton ATPase subunit B, brain isoform	5	1.13	0.129	0.405
P61158	Actin-related protein 3	5	1.13	0.188	0.322
Q92622	Vesicle-associated membrane protein-associated protein BC	5	1.12	0.083	0.235
P27824	Calnexin	5	1.12	0.034	0.027
Q43390	Heterogeneous nuclear ribonucleoprotein R	5	1.12	0.162	0.516
Q95881	Thioredoxin domain-containing protein 12	4	1.12	0.129	0.440
Q9N208	Endoplasmic reticulum aminopeptidase 1	5	1.12	0.131	0.438
Q92788	Lactoferrin	1	1.12	NA	NA
Q9Y262	Eukaryotic translation initiation factor 3 subunit L	3	1.12	0.027	0.055
P64244	60S ribosomal protein L7a	5	1.12	0.128	0.429
P61264	60S ribosomal protein L26	1	1.12	NA	NA
Q06830	Peroxiredoxin-1	5	1.12	0.299	0.629
P10140	Succinate dehydrogenase [ubiquinone] [iron-protein] subunit, mitochondrial	5	1.12	0.088	0.265
P00205	Aspartate aminotransferase, mitochondrial	4	1.11	0.163	0.556
P11310	Medium-chain specific acyl-CoA dehydrogenase, mitochondrial	4	1.11	0.166	0.562
P56225	Sulfatransferase 1A1	1	1.11	NA	NA
P11940	Polydiphosphate binding protein	5	1.11	0.029	0.021
P46777	60S ribosomal protein L5	5	1.11	0.057	0.142
Q9LJ21	Slimstatin-like protein 2, mitochondrial	3	1.11	0.102	0.409
Q14165	Malexin	5	1.11	0.099	0.356
P01911	HLA class II histocompatibility antigen, DRB1-15 beta chain	3	1.11	NA	NA
Q9L8V1	Sorting nexin-8	1	1.11	0.084	0.366
P43686	26S protease regulatory subunit 8B	1	1.11	0.107	0.450
P56878	Histone H2B type 1-D	2	1.10	NA	NA
Q96142	Polydiphosphate-binding protein 2	1	1.10	0.041	0.140
Q9UM5A	Pre-mRNA-processing factor 19	1	1.10	NA	NA
P01903	HLA class II histocompatibility antigen, DR alpha chain	5	1.10	0.251	0.667
E9P300	Nascent polypeptide-associated complex subunit alpha, muscle-specific form	3	1.10	0.582	0.886
Q9H020	Manganese-transporting ATPase 13A1	3	1.10	0.228	0.721
Q75643	US small nuclear ribonucleoprotein 200 kDa helicase	5	1.09	0.044	0.111
Q02878	60S ribosomal protein L6	5	1.09	0.104	0.438
Q76003	Gutaredoxin-3	1	1.09	NA	NA
P62909	26S ribosomal protein S36, mitochondrial	4	1.09	0.070	0.265
Q02978	Mitochondrial 2-oxoglutarate/malate carrier protein	2	1.09	NA	NA
P22396	40S ribosomal protein S3	5	1.09	0.034	0.066
Q14745	Na(+)/H(+) exchange regulatory cofactor NHE-RF1	1	1.09	NA	NA
P18859	ATP synthase-coupling factor 6, mitochondrial	4	1.09	0.093	0.432
Q15435	Protein phosphatase 1 regulatory subunit 7	1	1.09	NA	NA
Q75366	Vesicle-trafficking protein SEC22D	5	1.09	0.165	0.664
Q8UXK7	Adipocyte enhancer-binding protein 1	3	1.09	0.278	0.795
P22207	Non-specific lipid-transfer protein	1	1.08	NA	NA
P22269	40S ribosomal protein S19	5	1.08	0.075	0.342
Q00487	26S proteasome non-ATPase regulatory subunit 14	1	1.08	NA	NA
Q964E4	Fur upstream element-binding protein 1	1	1.08	0.084	0.438
P14314	Glucosylase 2 subunit beta	5	1.08	0.118	0.534
P61581	14-3-3 protein gamma	2	1.08	NA	NA
Q75847	ATP synthase subunit c1, mitochondrial	5	1.08	0.069	0.324
P68871	Hemoglobin subunit beta	5	1.08	0.439	0.869
P08134	Pro-related GTP-binding protein Rhoc	4	1.08	0.098	0.493
P11387	DNA topoisomerase 1	1	1.08	NA	NA
P22368	NAD-dependent malic enzyme, mitochondrial	1	1.08	NA	NA

Table S16-Average Metastatic Tumors

P30048	Thioredoxin-dependent peroxide reductase, mitochondrial	5	1.08	0.194	0.726
P30041	Proteindisin-6	1.08	1.08	0.069	0.287
P22061	Protein-L-isopartate(O-aspartate) O-methyltransferase	1	1.07	NA	NA
O6626	Endoplasmic reticulum resident protein 44	5	1.07	0.172	0.705
P80303	Nucleobindin-2	1	1.07	NA	NA
P54727	UV excision repair protein RAD23 homolog B	4	1.07	0.092	0.509
O9Y1E1	Hepatitis-derived growth factor-related protein 3	1	1.07	NA	NA
O8H5T7	Parkinson disease 7 domain-containing protein 1	1	1.07	NA	NA
POC505	Ig lambda-2 chain C regions	5	1.07	0.328	0.846
P90237	ATP-dependent 6-phosphofructokinase, muscle type	5	1.07	0.168	0.706
Q2U4N6	26S proteasome non-ATPase regulatory subunit 13	2	1.07	NA	NA
P62280	40S ribosomal protein S11	5	1.07	0.134	0.646
P69505	Hemoglobin subunit alpha	5	1.07	0.438	0.888
Q13596	Sorting nexin-1	1	1.07	0.106	0.606
Q92841	Probable ATP-dependent RNA helicase DDX17	5	1.06	0.000	0.354
Q8U1K1	Chondrin sulfate proteoglycan 4	1	1.06	0.023	0.076
P05198	Eukaryotic translation initiation factor 2 subunit 1	3	1.06	0.093	0.583
Q16401	26S proteasome non-ATPase regulatory subunit 5	1	1.06	NA	NA
P55684	Eukaryotic translation initiation factor 3 subunit B	4	1.06	0.168	0.640
P38117	Electron transfer flavoprotein subunit beta	5	1.06	0.092	0.576
O9YJ38	60S ribosomal protein L36	4	1.06	0.049	0.337
P18896	40S ribosomal protein S2	5	1.06	0.053	0.362
Q02543	60S ribosomal protein L18a	4	1.05	0.078	0.548
P62814	60S ribosomal protein L14	5	1.05	0.085	0.579
P03038	Melexin	5	1.05	0.131	0.717
Q16891	Mitochondrial inner membrane protein	5	1.05	0.105	0.661
Q55353	Heterochromatin protein 1-binding protein 3	5	1.05	0.149	0.655
P32988	26S protease regulatory subunit 5	5	1.05	0.090	0.610
Q8N1G4	Leucine-rich repeat-containing protein 47	4	1.05	0.101	0.661
P63208	S-phase kinase-associated protein 1	1	1.05	NA	NA
Q658Y4	Protein FAM81A1	1	1.05	NA	NA
Q12342	Serine/arginine-rich splicing factor 9	1	1.05	NA	NA
P28331	NADH-ubiquinone oxidoreductase 75 kDa subunit, mitochondrial	3	1.05	0.081	0.632
P19190	Cytochrome b-c1 complex subunit 1, mitochondrial	5	1.05	0.149	0.781
Q10591	Microtubule-associated protein RP/EB family member 1	5	1.04	0.112	0.722
P62763	40S ribosomal protein S6	4	1.04	0.060	0.505
PO1023	Alpha-2-macroglobulin	5	1.04	0.232	0.861
Q14157	Ubiquitin-associated protein 2-like	1	1.04	NA	NA
P62317	60S ribosomal protein L8	4	1.04	0.169	0.818
P52705	ATP synthase subunit alpha, mitochondrial	5	1.04	0.076	0.609
P11021	7S kDa glucose-regulated protein	5	1.04	0.074	0.617
P20700	Lamin B1	5	1.04	0.055	0.509
P11177	Pyruvate dehydrogenase E1 component subunit beta, mitochondrial	5	1.04	0.088	0.595
O42424	26S proteasome non-ATPase regulatory subunit 3	5	1.04	0.093	0.596
A10515	Dihydropyridine-residue acetyltransferase component of pyruvate dehydrogenase complex, mitochondrial	4	1.04	0.112	0.760
P01676	Ig alpha-1 chain C region	3	1.04	0.628	0.958
P44456	Vesicle-fusing ATPase	3	1.04	0.165	0.849
P27797	Calreticulin	5	1.03	0.155	0.837
Q14890	Erp97-1	2	1.03	NA	NA
P19371	T-complex protein 1 subunit beta	5	1.03	0.070	0.609
Q9H5E4	Isolecithin-3-phosphatase, mitochondrial	5	1.03	0.054	0.575
P21912	Succinate dehydrogenase (ubiquinone) iron-sulfur subunit, mitochondrial	5	1.03	0.150	0.803
P64242	ATP synthase subunit gamma, mitochondrial	4	1.03	0.075	0.709
P46327	Fatty acid synthase	2	1.03	NA	NA
P05107	Integrin beta-2	3	1.03	0.245	0.959
P55795	Heterogeneous nuclear ribonucleoprotein H2	1	1.03	NA	NA
Q14697	Neutral alpha-glucosidase AB	5	1.03	0.108	0.818
P19311	Ezrin	5	1.03	0.153	0.879
P84098	60S ribosomal protein L19	1	1.02	NA	NA
Q00303	Eukaryotic translation initiation factor 3 subunit F	3	1.02	0.183	0.917
P19373	Cytochrome c oxidase subunit 4 isozyme 1, mitochondrial	5	1.02	0.130	0.658
Q13011	Delta(3,5)-Delta(2,4)-dienoyl-CoA isomerase, mitochondrial	5	1.02	0.060	0.742
Q62664	Feritin-3	1	1.02	NA	NA
P61026	Rar-related protein Rab-10	5	1.02	0.115	0.888
Q8K1X2	Cell division cycle and apoptosis regulator protein 1	1	1.02	NA	NA
Q8YV03	Dehydrogenase-CoA heme domain-containing protein	1	1.02	NA	NA
P32969	60S ribosomal protein L9	5	1.01	0.054	0.823
Q10505	Signal peptidase complex subunit 2	5	1.01	NA	NA
P29874	Cytochrome c oxidase subunit 6a, mitochondrial	4	1.01	0.124	0.652
Q12907	Vesicular integral-membrane protein VPS36	1	1.01	NA	NA
P46781	40S ribosomal protein S9	5	1.01	0.043	0.837
Q83878	CagA subfamily A member 3	1	1.01	NA	NA
P84103	Serine/arginine-rich splicing factor 3	4	1.01	0.168	0.968
O43637	Isooctate dehydrogenase (NAD) subunit beta, mitochondrial	2	1.01	NA	NA
Q61477	GTP-AMF phosphotransferase AK5, mitochondrial	1	1.01	0.045	0.696
Q15008	26S proteasome non-ATPase regulatory subunit 6	2	1.00	NA	NA
Q10124	Allosteric phosphoprotein PEA-15	2	1.00	NA	NA
Q00325	Phospholipase carrier protein, mitochondrial	5	1.00	0.090	0.578
Q72827	E3 ubiquitin-protein ligase HUWE1	2	1.00	NA	NA
P39597	Dihydropyridine-residue succinyltransferase component of 2-oxoglutarate dehydrogenase complex, mitochondrial	1	1.00	0.042	0.661
P52943	Cysteine-rich protein 2	1	1.00	NA	NA
Q75489	NADH dehydrogenase (ubiquinone) iron-sulfur protein 3, mitochondrial	5	1.00	0.128	0.971
P11443	5,6-dihydroxyindole-2-carboxylic acid oxidase	5	1.00	0.488	0.961
Q01085	Nucleosylin TIAR	1	0.99	NA	NA
P78734	Eukaryotic translation initiation factor 4 gamma 2	1	0.99	NA	NA
Q9Q129	Pyridoxase-2 phosphate oxidase	3	0.99	NA	NA
Q01844	RNA-binding protein EWS	3	0.99	0.235	0.965
Q9Y168	NADH dehydrogenase (ubiquinone) beta subcomplex subunit 9	3	0.99	0.270	0.965
Q9Q1K1	Nuclear protein sorting associated protein 35	4	0.99	0.083	0.873
Q13310	Polysialyltransferase 4	1	0.98	NA	NA
P15608	Cytochrome c oxidase subunit 5B, mitochondrial	5	0.98	0.141	0.913
P27708	CAD protein	3	0.98	0.182	0.929
P46977	Dolichyl-diphosphooligosaccharide-protein glycosyltransferase subunit STT3A	2	0.98	NA	NA
Q00203	AP-3 complex subunit beta-1	3	0.98	0.168	0.864
P55084	Trifunctional enzyme subunit beta, mitochondrial	5	0.98	0.103	0.843
P06559	Pyruvate dehydrogenase E1 component subunit alpha, somatic form, mitochondrial	2	0.98	NA	NA
P06991	T-complex protein 1 subunit delta	4	0.97	0.017	0.298
P31688	DnaJ homolog subfamily A member 1	3	0.97	0.176	0.895
P26359	ATP synthase F0) complex subunit B1, mitochondrial	3	0.97	0.016	0.211
Q15511	Actin-related protein 2/3 complex subunit 5	3	0.97	0.200	0.899
Q15293	Reticulocalbin-1	5	0.97	0.143	0.829
Q86P35	Actin-related protein 2/3 complex subunit 5-like protein	5	0.97	NA	NA
PO1800	Ig gamma-3 chain C region	4	0.97	0.174	0.860
P48643	T-complex protein 1 subunit epsilon	5	0.97	0.073	0.667
P62701	40S ribosomal protein S4, X isoform	5	0.97	0.082	0.616
P35606	Coatomer subunit beta'	1	0.97	NA	NA
Q7L5N1	COP9 signalosome complex subunit 6	5	0.96	0.101	0.730
Q14256	E3 ubiquitin(SG2) ligase TRIM25	3	0.96	0.108	0.754
P62277	40S ribosomal protein S13	5	0.96	0.071	0.608
P42768	60S ribosomal protein L35	1	0.96	NA	NA
Q02216	2-oxoglutarate dehydrogenase, mitochondrial	1	0.96	0.107	0.718
Q12000	26S proteasome non-ATPase regulatory subunit 2	5	0.96	0.130	0.762
P69603	60S ribosomal protein L25a	2	0.96	NA	NA
P69603	Cell division control protein 42 homolog	2	0.96	NA	NA
O9Y512	Sorting and assembly machinery component 50 homolog	2	0.96	NA	NA
P48735	Isooctate dehydrogenase (NAD), mitochondrial	4	0.95	0.155	0.758
P11279	Lysosome-associated membrane glycoprotein 1	3	0.96	0.490	0.935
PO1834	Ig kappa chain C region	5	0.96	0.326	0.896
Q15751	Cytosolic FMR1-interacting protein 1	1	0.96	NA	NA
Q75165	DnaJ homolog subfamily C member 13	2	0.95	NA	NA
P35013	Basn3in	3	0.95	0.300	0.890
P40227	T-complex protein 1 subunit zeta	5	0.95	0.069	0.527
P48411	Elongation factor Tu, mitochondrial	5	0.95	0.243	0.853
Q68A48	Regulator complex protein LAMTOR1	1	0.95	NA	NA
Q8H859	Thioredoxin domain-containing protein 5	5	0.95	0.129	0.724
Q42858	Huntingtin	1	0.95	NA	NA
Q11177	Serine/threonine-protein kinase PKM 2	1	0.95	NA	NA
Q8N2H3	Probable aminopeptidase NPEPL1	1	0.95	NA	NA
Q14847	LIM and SH3 domain protein 1	3	0.95	0.164	0.778
P16403	Histone H1.2	2	0.95	NA	NA
Q52973	Transportin-1	2	0.95	NA	NA
P14627	Cytochrome b-c1 complex subunit 7	4	0.95	0.097	0.604
Q00202	26S proteasome non-ATPase regulatory subunit 12	4	0.95	NA	NA
Q96653	Calneum B homologous protein 1	2	0.95	NA	NA
P39656	Dolichyl-diphosphooligosaccharide-protein glycosyltransferase 48 kDa subunit	5	0.94	0.093	0.551
Q96479	CDH9/PCP2, endoplasmic bifunctional protein	1	0.94	NA	NA
Q02996	GoII apparatus protein 1	2	0.94	NA	NA
Q62524	Feruloyltransferase element-binding protein 3	2	0.94	NA	NA
P49748	Very long-chain specific acyl-CoA dehydrogenase, mitochondrial	4	0.94	0.104	0.566
Q60262	Guanine nucleotide-binding protein G(I)/G(S)/G(O) subunit gamma-7	1	0.93	NA	NA
Q60749	Sorting nexin-2	2	0.93	NA	NA
Q14980	Nuclear mitotic apparatus protein 1	5	0.93	0.023	0.039
O9Y4L1	Hypoxia up-regulated protein 1	5	0.93	0.148	0.865
P28198	Probable ATP-dependent RNA helicase DDX8	4	0.93	0.053	0.268
P62987	Ubiquitin-60S ribosomal protein L40	3	0.93	0.382	0.869
P35573	Clyocyan debranching enzyme	1	0.93	NA	NA
P47756	F-actin-capping protein subunit beta	5	0.93	0.088	0.453
Q15173	Membrane-associated progesterone receptor component 2	4	0.93	0.117	0.566
Q52997	Protein NGRG1	3	0.93	0.128	0.610
Q75964	ATP synthase subunit c, mitochondrial	3	0.93	0.073	0.345
P61758	Prefoldin subunit 3	1	0.92	NA	NA
P11667	Protein disulfide isomerase A4	5	0.92	0.155	0.569
Q02499	ATP-dependent RNA helicase DDX1	4	0.92	0.127	0.544
P29119	Thymidylate kinase	1	0.92	NA	NA
Q8U4H9	NADH-cytochrome b5 reductase 1	5	0.92	0.065	0.249
Q43760	Synaptotagmin-2	1	0.92	NA	NA
P56556	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex subunit 6	2	0.91	NA	NA
Q30208	Mitochondrial import inner membrane translocase subunit TIM50	2	0.91	NA	NA
P14625	Endoplasmic	5	0.91	0.125	0.490
P06703	Protein S100-A6	2	0.91	NA	NA
P48444	Coatomer subunit delta	1	0.91	NA	NA
P48047	ATP synthase subunit O, mitochondrial	5	0.91	0.115	0.443
P40703	Signal transducer and activator of transcription 3	4	0.91	0.108	0.423
P17931	Calnexin-3	5	0.91	0.112	0.428
P46109	Cdk-like protein	1	0.90	NA	NA
P46939	Trifunctional enzyme subunit alpha, mitochondrial	5	0.90	0.163	0.378
Q15260	Surfactant protein 4	1	0.90	NA	NA
P06228	Eukaryotic translation initiation factor 3 subunit E	1	0.90	NA	NA
P39226	Sironin	1	0.90	NA	NA
Q14683	Structural maintenance of chromosomes protein 1A	4	0.90	0.056	0.149
P47985	Cytochrome b-c1 complex subunit Rieske, mitochondrial	3	0.89	0.066	0.233
P61970	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex subunit 8	1	0.89	NA	NA
P63261	Actin, cytoplasmic 2	2	0.89	NA	NA
Q8P209	Pre-miRNA-processing-splicing factor 1	3	0.89	0.087	0.315
P64839	Cytochrome b-24S heavy chain	1	0.89	NA	NA
P48388	T-complex protein 1 subunit gamma	5	0.89	0.077	0.196
P64632	Calpain small subunit 1	5	0.89	0.087	0.148
P50960	T-complex protein 1 subunit theta	5	0.89	0.081	0.216
Q15942	Zyxin	4	0.89	0.184	0.822
Q50350	V-type proton ATPase 116 kDa subunit a isoform 1	5	0.89	0.142	0.443
Q7KZF4	Sphingomyelinase 2	5	0.89	0.058	0.106
Q73036	NADH dehydrogenase (ubiquinone) iron-sulfur protein 2, mitochondrial	4	0.88	0.168	0.508
Q8U4P9	Translocation protein SEC23B homolog	1	0.88	NA	NA
P40429	60S ribosomal protein L13a	5	0.88	0.132	0.384
Q8U454	DnaJ homolog subfamily B member 11	3	0.88	0.097	0.308
P46891	Nestin	3	0.88	0.369	0.734
Q9P0L0	Vesicle-associated membrane protein-associated protein A	3	0.88	0.060	0.155

Table S16-Average Metastatic Tumors

Q9Y265	RuvB-like 1	2	0.87	NA	NA
Q9P493	Microtubule-actin cross-linking factor 1, isoforms 1&2/3/5	4	0.87	0.162	0.379
P43304	Glycerol-3-phosphate dehydrogenase, mitochondrial	5	0.87	0.162	0.447
P06981	Ribose phosphate pyrophosphokinase 1	1	0.87	NA	NA
P47813	Eukaryotic translation initiation factor 1A, X-chromosomal	1	0.87	NA	NA
O60763	General vesicular transport factor p115	2	0.87	NA	NA
Q99460	26S proteasome non-ATPase regulatory subunit 1	2	0.87	NA	NA
P01942	Kinogen-1	3	0.87	0.574	0.629
Q96733	Nucleosome assembly protein 1-like 4	4	0.86	0.102	0.240
Q95864	Protein S100-A13	5	0.86	0.160	0.400
O9P030	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 13	1	0.86	NA	NA
P24752	Acetyl-CoA acetyltransferase, mitochondrial	5	0.86	0.089	0.158
O15455	Toll-like receptor 3	1	0.86	NA	NA
P25685	DnaJ homolog subfamily B member 1	1	0.86	NA	NA
P31376	Kinesin-1 heavy chain	1	0.86	NA	NA
P30153	Semithionone-protein phosphatase 2A 65 kDa regulatory subunit A alpha isoform	6	0.86	0.163	0.386
Q96714	3-hydroxyacyl-CoA dehydrogenase type-2	4	0.85	0.158	0.391
O99832	T-complex protein 1 subunit eta	5	0.85	0.114	0.236
Q9Y276	Calcium-binding protein 39	1	0.85	NA	NA
P55072	Transitional endoplasmic reticulum ATPase	5	0.85	0.122	0.244
P51788	H(+)/Cl(-) exchange transporter 7	1	0.84	NA	NA
P56020	Hsc70-interacting protein	1	0.84	0.136	0.278
P42765	3-keatoyl-CoA thiolase, mitochondrial	5	0.84	0.064	0.053
P62461	Collagen alpha-1(I) chain	1	0.84	NA	NA
P11807	T-complex protein 1 subunit alpha	5	0.84	0.179	0.380
O16352	Alpha-interixin	1	0.84	NA	NA
P51053	Histone H2B type F-S	2	0.83	NA	NA
Q27381	Inverted form-2	0.83	0.067	0.071	
P07384	Calpain-1 catalytic subunit	4	0.83	0.134	0.264
Q9P293	Arkyrin repeat and FYVE domain-containing protein 1	2	0.83	NA	NA
P08496	Cathrin light chain A	4	0.83	0.077	0.095
P30622	CAAP-Gly domain-containing linker protein 1	1	0.83	NA	NA
Q9Y230	RuvB-like 2	4	0.83	0.122	0.224
P53621	Oatomer subunit alpha	4	0.83	0.090	0.129
Q9H449	EH domain-containing protein 1	3	0.83	0.197	0.440
P56736	Topomycin alpha-4 chain	3	0.83	0.101	0.132
O14108	Lysosome membrane protein 2	5	0.83	0.188	0.365
O43078	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 2	1	0.82	NA	NA
P31943	Heterogeneous nuclear ribonucleoprotein H	2	0.82	NA	NA
P55209	Nucleosome assembly protein 1-like 1	3	0.82	0.141	0.301
P51812	Ribosomal protein S6 kinase alpha-3	2	0.82	0.228	0.478
P17858	ATP-dependent 6-phosphofructokinase, liver type	5	0.82	0.133	0.211
O75340	Programmed cell death protein 6	2	0.82	NA	NA
O62614	Apoptoprotein O-like	1	0.82	NA	NA
O5ULAO	Aspartyl aminopeptidase	2	0.82	NA	NA
O6UNF0	Protein kinase C and casein kinase substrate in neurons protein 2	1	0.82	NA	NA
O13561	Dynactin subunit 2	5	0.81	0.081	0.064
P00403	Cytochrome c oxidase subunit 2	3	0.81	0.279	0.534
P52244	4S5 ribosomal protein S15a	5	0.81	0.071	0.043
Q9P324	DnaJ homolog subfamily C member 5	1	0.81	NA	NA
P00488	Coagulation factor XIII A chain	1	0.81	NA	NA
P81225	Ras-related protein Rap-2b	1	0.81	0.173	0.348
P42025	Beta-centradin	1	0.81	NA	NA
P27816	Microtubule-associated protein 4	5	0.81	0.229	0.452
Q9RT55	Phosphatidylinositol-3-phosphatase SAC1	1	0.81	0.145	0.274
P51532	Transcription activator BRG1	1	0.81	NA	NA
P16435	NADPH-cytochrome P450 reductase	3	0.80	0.084	0.123
O95811	Angiogenesis-inducing factor 1, mitochondrial	2	0.80	NA	NA
P56402	Emerin	5	0.80	0.145	0.204
O9H970	Exocyst complex component 1	1	0.80	NA	NA
P54520	Alpha-soluble NSF attachment protein	2	0.80	0.449	0.913
Q9Y4F1	FERM, RhoGEF and pleckstrin domain-containing protein 1	2	0.80	NA	NA
P50151	Guanine nucleotide-binding protein G(I)/G(S)/G(O) subunit gamma-10	1	0.80	NA	NA
Q14556	Phosphoribosyl pyrophosphate synthase-associated protein 1	2	0.80	NA	NA
O86V87	Scavenger receptor cysteine-rich type 1 protein M130	1	0.80	NA	NA
P21589	S <sup>2</sup> -nucleotidase	0.80	NA	NA	
P21964	Catechol O-methyltransferase	1	0.79	NA	NA
O10567	AP-1 complex subunit beta-1	3	0.79	0.169	0.306
P02545	Protein-A2	5	0.79	0.138	0.168
O12913	Receptor-type tyrosine-protein phosphatase eta	1	0.79	NA	NA
O75914	Semithionone-protein kinase PAK 3	1	0.79	NA	NA
P48416	Alpha-aminoadipate-semialdehyde dehydrogenase	1	0.79	NA	NA
O94826	Mitochondrial import receptor subunit TOM70	2	0.79	NA	NA
P56362	Galectin-1	5	0.79	0.114	0.104
O14011	Casp8-inducible RNA-binding protein	1	0.79	NA	NA
O8ZD70	Abi interactor 1	1	0.79	NA	NA
P25690	Protein PKM1	5	0.78	0.143	0.162
O86V98	Stimulator of interferon genes protein	2	0.78	NA	NA
P35637	RNA-binding protein FUS	5	0.78	0.281	0.427
P37235	Hippocampin-like protein 1	2	0.78	NA	NA
Q93009	Ubiquitin carboxyl-terminal hydrolase 7	1	0.78	NA	NA
Q92252	Methylmalonate-semialdehyde dehydrogenase [acylating], mitochondrial	3	0.78	0.075	0.079
O9H444	Changed nucleoside body protein 4b	1	0.78	NA	NA
O05193	Dynamitin-1	1	0.78	NA	NA
O9H4D4	Septin-9	5	0.77	0.062	0.015
P31942	Heterogeneous nuclear ribonucleoprotein H3	1	0.77	NA	NA
O94979	Protein transport protein Sec13A	5	0.77	0.084	0.038
O15226	Selenium-binding protein 1	4	0.77	0.027	0.002
O16861	UTP-glucose-1-phosphate uridylyltransferase	2	0.77	NA	NA
P51648	Fatty acylside dehydrogenase	1	0.77	NA	NA
Q9Y9V9	Nesprin-2	2	0.76	NA	NA
P52735	Protein SEC13 homolog	1	0.76	NA	NA
P06443	Dolichyl-diphosphooligosaccharide--protein glycosyltransferase subunit 1	5	0.76	0.112	0.073
O05271	ATP-dependent RNA-helicase DDX3X	3	0.76	0.167	0.085
P35813	Protein phosphatase 1A	1	0.76	NA	NA
O99629	Caspase-1	1	0.76	NA	NA
O9H6L7	Plasminogen receptor (KT)	1	0.76	NA	NA
P51148	Ras-related protein Rab-5C	1	0.76	NA	NA
O16270	Insulin-like growth factor-binding protein 7	4	0.76	0.210	0.275
P30262	Guanine nucleotide-binding protein G(i) subunit alpha isoforms short	4	0.76	NA	NA
O9C2R7	ATP-dependent RNA helicase DDX24	1	0.75	NA	NA
O12913	Ras GTPase-activating protein-binding protein 1	2	0.75	NA	NA
O62021	C-Jun amino-terminal kinase-interacting protein 4	1	0.75	NA	NA
P04792	Heat shock protein beta-1	5	0.75	0.138	0.107
O9P027	Apoptoprotein A-V	5	0.75	0.293	0.384
O9Y6N5	Sulfide quinone oxidoreductase, mitochondrial	5	0.75	0.260	0.331
O53QD0	Estradiol 17 beta-dehydrogenase 12	5	0.75	0.117	0.070
O13075	Early endosome antigen 1	2	0.75	NA	NA
O96S07	Cancer-related nucleoside-triphosphatase	1	0.75	NA	NA
O12787	Aspartyl-asparaginyl beta-hydroxylase	5	0.74	0.068	0.012
P48444	Dolichyl-diphosphooligosaccharide--protein glycosyltransferase subunit 2	5	0.74	0.135	0.114
P48458	Signal recognition particle 9 kDa protein	3	0.74	0.217	0.302
AF9598	E3-ubiquitin-protein ligase complex subunit 2	4	0.74	NA	NA
P55060	Exportin-2	4	0.74	0.037	0.004
O9P0K7	Arkytorin	1	0.74	NA	NA
Q9U2E7	Structural maintenance of chromosomes protein 3	1	0.74	0.067	0.045
O14735	CDP-diacylglycerol-inositol 3-phosphatidyliniferase	2	0.74	NA	NA
O00765	Cytoskeleton-associated protein 4	5	0.73	0.086	0.023
O12718	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 5	1	0.73	NA	NA
P00367	Glutamate dehydrogenase 1, mitochondrial	5	0.72	0.043	0.002
O6U050	Calcium-binding mitochondrial carrier protein Aralar2	1	0.72	NA	NA
P00452	Collagen alpha-1(I) chain	3	0.72	0.068	0.029
P53992	Protein transport protein Sec24C	1	0.72	NA	NA
P56221	Catenin alpha-1	3	0.72	0.060	0.031
P46297	Protein ERN1-53	0.71	0.132	0.062	
P22786	Camifene O-palmitoyltransferase 2, mitochondrial	1	0.71	NA	NA
O14633	Dynactin subunit 1	5	0.71	0.087	0.018
O8TE3X	Importin-4	1	0.71	NA	NA
O99442	Translocation protein SEC28	3	0.71	0.155	0.155
P10321	HLA class I histocompatibility antigen, Cw-7 alpha chain	2	0.70	NA	NA
O9NP97	Dynein light chain roadblock-type 1	1	0.70	NA	NA
O75323	Protein NipSnap homolog 2	1	0.70	NA	NA
P00740	Coagulation factor IX	1	0.70	NA	NA
O6NUM8	Abi-trans-retinol 13,14-reductase	1	0.70	NA	NA
Q9Y277	Voltage-dependent anion-selective channel protein 3	3	0.70	0.157	0.148
P58198	Eukaryotic initiation factor 4A-III	1	0.70	NA	NA
O9D0C3	Alkocyte plasma membrane-associated protein	5	0.69	0.180	0.111
P86603	Complement factor H	3	0.69	0.427	0.462
Q14956	Transmembrane glycoprotein NMB	5	0.69	0.498	0.494
P87870	Casein kinase II subunit beta	3	0.69	0.108	0.074
O43707	Alpha-actinin-4	5	0.69	0.123	0.038
Q71D03	Histone H3.2	1	0.69	NA	NA
P54709	Sodium/potassium-transporting ATPase subunit beta-3	5	0.69	0.201	0.133
P29266	Nitrotyrosylated alanine-rich C-kinase substrate	5	0.69	0.160	0.078
O9Y639	Neuroplastin	2	0.68	NA	NA
P16615	Sarcoplasmic/endoplasmic reticulum calcium ATPase 2	5	0.68	0.106	0.022
P60706	Actin, cytoplasmic 1	3	0.68	0.078	0.037
O9Y300	RNA-splicing ligase RtcB homolog	5	0.68	0.046	0.001
P56995	Arnenin A11	5	0.67	0.151	0.060
O15165	Serum paraoxonase/arylesterase 2	1	0.67	NA	NA
P35580	Myosin-10	5	0.67	0.147	0.051
P0C208	Histone H2A type 1	4	0.67	0.127	0.048
O14204	Cytosolic dynein 1 heavy chain 1	5	0.66	0.090	0.010
O75915	PRA1 family protein 3	4	0.66	0.139	0.060
P42566	Epidermal growth factor receptor substrate 15	1	0.66	NA	NA
P04217	Alpha-1B-glycoprotein	5	0.66	0.267	0.197
O16795	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 9, mitochondrial	4	0.66	0.178	0.102
P43307	Translocin-associated protein subunit alpha	2	0.66	NA	NA
P46939	Utrrophin	4	0.65	0.139	0.056
O96015	Rellucocublin-3	1	0.65	NA	NA
P12235	ADP-ATP translocase 1	1	0.65	NA	NA
O75477	Erlin-1	1	0.65	NA	NA
Q01813	ATP-dependent 6-phosphofructokinase, platelet type	2	0.65	NA	NA
O65207	Myelin protein zero-like protein 1	1	0.65	NA	NA
P04114	Apoptoprotein B-100	3	0.65	0.534	0.502
P08311	Cathepsin G	0.64	NA	NA	
O16695	Histone H3.1	4	0.64	0.171	0.082
P62805	Histone H4	5	0.64	0.135	0.030
O96552	GPI transaminase component PIG-S	1	0.64	NA	NA
O15149	Plectin	5	0.64	0.062	0.002
O96905	Endoplasmic reticulum-Golgi intermediate compartment protein 1	3	0.64	0.174	0.122
P01437	Tubulin beta chain	4	0.64	0.102	0.022
O15562	Transforming growth factor-beta-induced protein ig-h3	4	0.64	0.330	0.264
P14209	CD39 antigen	1	0.63	NA	NA
O00264	Membrane-associated progesterone receptor component 1	5	0.63	0.133	0.026
P08107	Heat shock 70 kDa protein 1A1B	5	0.63	0.102	0.011
O60504	Vinculin	1	0.63	NA	NA
O96RX8	Protein regulatory protein FAM213A	3	0.63	0.143	0.083
O9NFV8	N-acetylneuraminate cytidylyltransferase	1	0.63	NA	NA
O14764	Major vault protein	1	0.62	0.068	0.002
O43865	Putative adenosylhomocysteinase 2	3	0.62	0.135	0.074
P81163	Alpha-centradin	2	0.62	NA	NA
P00390	Citratehione reductase, mitochondrial	1	0.62	0.189	0.128
O9H223	EH domain-containing protein 4	2	0.62	NA	NA
O60313	Dynamitin-like 120 kDa protein, mitochondrial	5	0.62	0.087	0.005
Q9Y232	Band 4.1 like protein 3	2	0.62	NA	NA
O15019	Septin-2	5	0.62	0.084	0.005

Table S16-Average Metastatic Tumors

O60E03	Tubulin alpha-1C chain	3	0.61	0.222	0.158
P11655	Calpain-2 catalytic subunit	2	0.61	NA	NA
O68Z22	Sialohectin	1	0.61	NA	NA
O00610	Clafrin heavy chain 1	5	0.61	0.124	0.016
O29505	COP9 signalosome complex subunit 5	2	0.61	NA	NA
P05362	Intercellular adhesion molecule 1	4	0.61	0.157	0.050
O99VAZ	Septin-11	3	0.60	0.178	0.108
O05692	Caldesmon	5	0.60	0.235	0.099
Q13418	Integrin-linked protein kinase	2	0.60	NA	NA
O6NC43	Reticulon-4	5	0.60	0.051	0.001
P05443	2',3'-cyclic-nucleotide 3-phosphodiesterase	5	0.60	0.100	0.009
P13861	cAMP-dependent protein kinase type II-alpha regulatory subunit	5	0.60	0.037	0.000
O66CW1	AP-2 complex subunit mu	2	0.60	NA	NA
O95762	AP-2 complex subunit alpha-1	5	0.59	0.125	0.014
O9MKJ1	Calcium-binding mitochondrial carrier protein SCaMC-1	4	0.59	0.104	0.015
O9C0E8	Protein lanapark	2	0.59	NA	NA
P02776	Platelet factor 4	1	0.58	NA	NA
P47755	F-actin-capping protein subunit alpha-2	2	0.58	NA	NA
P12111	Collagen alpha-2(VI) chain	2	0.58	0.168	0.052
Q71U36	Tubulin alpha-1A chain	1	0.58	NA	NA
O9J616	Guanine nucleotide-binding protein G(i)(G)(S)(G) subunit gamma-12	1	0.58	NA	NA
P42167	Lamins associated polypeptide 2, isoforms beta/gamma	1	0.57	0.139	0.029
O75131	Copine-3	5	0.58	0.123	0.011
O6NC26	LEM domain-containing protein 2	1	0.57	NA	NA
Q14344	Guanine nucleotide-binding protein subunit alpha-13	1	0.57	0.062	0.003
O9MLV3	Tropomodulin-3	1	0.57	NA	NA
P28208	ATP-binding cassette sub-family D member 3	1	0.57	NA	NA
P00352	Retinal dehydrogenase 1	5	0.57	0.271	0.106
O9P9M0	Core histone macro-H2A.2	2	0.57	NA	NA
O69716	Catein delta-1	1	0.57	0.128	0.011
P68363	Tubulin alpha-1B chain	1	0.57	NA	NA
O9A919	Endonuclease domain-containing protein	3	0.56	0.147	0.060
P08119	Platelet-derived growth factor receptor beta	1	0.56	NA	NA
P09497	Clafrin light chain B	4	0.56	0.284	0.131
O9K211	Very long-chain enoyl-CoA reductase	1	0.55	NA	NA
O9JL44	Programmed cell death 6-interacting protein	1	0.55	0.110	0.008
P25583	High mobility group protein B2	5	0.55	0.170	0.025
Q02880	DNA topoisomerase 2-beta	1	0.55	NA	NA
Q12850	Unconventional myosin Ie	1	0.55	NA	NA
P11498	Pyruvate carboxylase, mitochondrial	1	0.55	NA	NA
O14650	Myosin regulatory light chain 12B	5	0.55	0.141	0.012
O6S5J8	Extended synaptotagmin-1	5	0.54	0.088	0.002
P05091	Aldehyde dehydrogenase, mitochondrial	5	0.54	0.134	0.010
P04040	Catalase	5	0.54	0.308	0.115
O99338	Ubiquitin carboxyl-terminal hydrolase isozyme L1	5	0.54	0.244	0.084
P11413	Glucose-6-phosphate 1-dehydrogenase	3	0.54	0.253	0.134
Q15181	Septin-7	5	0.54	0.057	0.004
O69814	Histone H2B type 1-K	1	0.53	NA	NA
P17012	cAMP-dependent protein kinase catalytic subunit alpha	4	0.53	0.089	0.006
Q14244	Futillin-2	4	0.53	0.234	0.114
P12109	Collagen alpha-1(VI) chain	5	0.53	0.216	0.043
Q09665	Neuroblast differentiation-associated protein ANNAK	5	0.53	0.121	0.028
O9NV07	Alpha-parvin	1	0.53	NA	NA
P00303	CD81 antigen	3	0.53	0.095	0.010
P07357	Complement component C8 alpha chain	1	0.53	NA	NA
P12110	Collagen alpha-2(VI) chain	5	0.52	0.213	0.039
P23634	Plasma membrane calcium-transporting ATPase 4	4	0.52	0.118	0.012
O48323	Unconventional myosinId	4	0.52	0.193	0.041
O9V490	Talin-1	5	0.52	0.085	0.001
P15144	Aminopeptidase N	1	0.52	NA	NA
P08133	Annexin A6	1	0.51	0.155	0.008
P01024	Complement C3	5	0.51	0.290	0.082
Q02552	Lamins-B2	5	0.51	0.075	0.001
Q43175	D-3-phosphoglycerate dehydrogenase	2	0.51	NA	NA
O15413	Ryanodine receptor 3	1	0.51	NA	NA
P35222	Catein beta-1	1	0.51	0.242	0.048
P08571	Monocyte differentiation antigen CD14	5	0.50	0.249	0.052
O00577	Transcriptional activator protein Pur-alpha	3	0.50	0.202	0.075
P05579	Myosin-9	5	0.50	0.169	0.015
P00387	NADH-cytochrome b5 reductase 3	5	0.49	0.141	0.007
P12814	Alpha-actinin-1	5	0.49	0.098	0.000
O6L403	Phenylethylene oxidase 1	5	0.49	0.128	0.005
P06960	Myosin light polypeptide 6	5	0.49	0.097	0.002
O6C388	Aktasin-3	5	0.49	0.157	0.010
Q15336	Vesicle-associated membrane protein 3	2	0.49	0.102	0.020
O15653	Synaptophysin-like protein 1	2	0.49	NA	NA
P00355	Histone H2A.2	5	0.49	0.062	0.001
Q08722	Leukocyte surface antigen CD47	2	0.49	NA	NA
P00073	Annexin A7	3	0.48	0.158	0.043
P04216	Thy-1 membrane glycoprotein	4	0.48	0.100	0.005
P35611	Alpha-adducin	3	0.47	0.055	0.005
P32119	Perlecan	5	0.47	0.096	0.002
O78746	Calcium-binding mitochondrial carrier protein Astar1	1	0.47	NA	NA
O8NEV1	Casein kinase II subunit alpha 3	1	0.47	NA	NA
P05270	Dynamin-2	1	0.47	NA	NA
O9K2N4	EH domain-containing protein 1	4	0.47	0.154	0.016
O15404	Ras suppressor protein 1	1	0.46	NA	NA
P41222	Frotylgandrin-H2 isomerase	2	0.46	NA	NA
O69811	ATP-binding cassette sub-family A member 8	2	0.46	NA	NA
O75655	Futillin-1	2	0.46	NA	NA
Q14192	Four and a half LIM domain protein 2	1	0.46	NA	NA
P02751	Fibronectin	5	0.45	0.452	0.156
P06918	Carbonic anhydrase 2	2	0.45	NA	NA
P04196	Histidine-rich glycoprotein	4	0.44	0.507	0.205
P07358	Complement component C8 beta chain	3	0.43	0.482	0.212
O96Z08	Protein Niban	2	0.43	NA	NA
O5JWF2	Guanine nucleotide-binding protein G(s) subunit alpha isoforms XLas	1	0.43	NA	NA
O94760	N(G),N(G)-dimethylarginine dimethylaminohydrolase 1	1	0.43	NA	NA
O9V456	Talin-2	1	0.43	NA	NA
O02591	Complement factor H-related protein 1	1	0.42	NA	NA
O5JRA6	Melanoma inhibitory activity protein 3	1	0.42	NA	NA
Q15041	ADP-ribosylation factor-like protein 6-interacting protein 1	1	0.42	NA	NA
Q4VEY8	Gamma-adducin	1	0.41	NA	NA
O13557	Calcium/calmodulin-dependent protein kinase type II subunit delta	1	0.41	NA	NA
O86722	Cholic acid phosphotransferase beta-mannosyltransferase	1	0.41	NA	NA
O9BTV4	Transmembrane protein 43	3	0.41	0.331	0.112
P23229	Integrin alpha-6	1	0.40	NA	NA
P23142	Filutin-1	1	0.40	NA	NA
P26008	Integrin alpha-3	2	0.40	NA	NA
P00747	Plasminogen	5	0.39	0.442	0.103
P29626	Guanine nucleotide-binding protein subunit alpha-11	1	0.39	0.315	0.097
Q14118	Dystroglycan	1	0.37	NA	NA
O6NR12	PDZ and LIM domain protein 7	1	0.37	NA	NA
P28447	Protein S100-A4	5	0.37	0.524	0.129
O96UF5	Tubulin beta-6 chain	2	0.37	NA	NA
P22413	Ectonucleotide pyrophosphatase/phosphodiesterase family member 1	2	0.37	0.324	0.089
O69HC4	PDZ and LIM domain protein 5	2	0.36	NA	NA
O96HN2	Putative adenosylhomocysteinase 3	1	0.36	NA	NA
P00756	Integrin alpha-V	1	0.36	NA	NA
P03010	AP-2 complex subunit beta	1	0.36	NA	NA
O77700	Target of Nesh-SH3	2	0.35	NA	NA
O6NR43	Choline transporter-like protein 2	1	0.35	NA	NA
P54289	Voltage-dependent calcium channel subunit alpha-2delta-1	1	0.35	NA	NA
O53052	Sialin-1	1	0.35	NA	NA
O9N115	Lipoma-preferred partner	2	0.33	NA	NA
P13031	Ras-related protein R-Ras	1	0.33	NA	NA
P59768	Guanine nucleotide-binding protein G(i)(G)(S)(G) subunit gamma-2	1	0.33	NA	NA
P02879	Fibrinogen gamma chain	5	0.33	0.415	0.054
P01600	Ig kappa chain V1 region Hau	1	0.32	NA	NA
P02654	Apolipoprotein C-I	5	0.31	0.468	0.065
O14786	Neurophilin-1	2	0.31	NA	NA
P02749	Beta-2-glycoprotein 1	4	0.30	0.512	0.102
O29252	Histone H1x	2	0.30	NA	NA
P02875	Fibrinogen beta chain	5	0.29	0.447	0.052
P14207	Folate receptor beta	1	0.29	NA	NA
Q15361	Microfilament-associated protein 5	1	0.29	NA	NA
P00026	Sodium/potassium-transporting ATPase subunit beta-1	1	0.28	NA	NA
Q08431	Lactoferrin	2	0.28	NA	NA
P16126	Lactoferrin C	2	0.27	0.579	0.084
P0DJI8	Serum amyloid A-1 protein	1	0.26	NA	NA
P60201	Myosin preadipol protein	2	0.26	NA	NA
P05164	Myeloperoxidase	5	0.26	0.628	0.099
ABMTJ3	Guanine nucleotide-binding protein G(i) subunit alpha-3	1	0.26	NA	NA
O96K22	BTB/POZ domain-containing protein NCTD12	3	0.24	0.352	0.055
O9V240	C-type lectin domain family 11 member A	1	0.24	NA	NA
O6LX08	Peptidase inhibitor 16	2	0.23	NA	NA
P14555	Phosphatase A2 membrane associated	2	0.21	NA	NA
P19643	Complement component C7	3	0.21	0.421	0.066
P02536	Apolipoprotein C-II	1	0.19	NA	NA
P05787	Neurin, type I cytoskeletal	2	0.19	NA	NA
P14136	Gial fibrillary acidic protein E	2	0.18	NA	NA
Q02224	Centromere-associated protein E	1	0.18	NA	NA
P12277	Creatine kinase B1 type	1	0.17	NA	NA
P02735	Actin, aortic smooth muscle	1	0.16	NA	NA
O8R6C1	Protein FRAZDE	1	0.15	NA	NA
Q63ZY3	KN motif and ankyrin repeat domain-containing protein 2	1	0.15	NA	NA
O92777	Synaptasin-2	2	0.15	NA	NA
O6LVY3	Olfactomedin-like protein 1	2	0.14	NA	NA
O6NRN5	Olfactomedin-like protein 3	1	0.13	NA	NA
O14767	Lateral-transforming growth factor beta-binding protein 2	1	0.11	NA	NA
P35243	Recoverin	1	0.11	NA	NA
P21246	Plectrognin	2	0.10	NA	NA
P35559	Filamin-2	1	0.10	NA	NA
O9HCJ8	Synaptic vesicle membrane protein VAMP-1 homolog-like	1	0.10	NA	NA
P03973	Arilukoproteinase	2	0.09	NA	NA
Q07564	Protein-density lipoprotein receptor-related protein 1	5	0.46	0.163	1.8E-04
P68371	Tubulin beta-4B chain	5	0.45	0.060	1.8E-04
O9A905	Erlin-2	5	0.44	0.163	7.7E-03
P05023	Sodium/potassium-transporting ATPase subunit alpha-1	5	0.44	0.112	1.9E-03
P05556	Integrin beta-1	5	0.44	0.112	1.8E-03
P04999	Guanine nucleotide-binding protein G(i) subunit alpha-2	5	0.43	0.119	2.0E-03
O9K2M1	Myosin	5	0.42	0.284	3.1E-02
O9B6L0	Tensin-1	4	0.42	0.267	4.8E-02
P13987	CD59 glycoprotein	4	0.42	0.297	3.9E-02
P00396	Calsin	4	0.42	0.184	8.6E-03
P00C05	Complement C4 B	4	0.41	0.155	1.1E-02
P07099	Epoikide hydrolase 1	4	0.41	0.161	4.1E-03
P43121	Cell surface glycoprotein MUC18	5	0.40	0.051	5.7E-05
P06899	Histone H2B type 1-J	5	0.40	0.175	6.5E-03
O58685	N(G),N(G)-dimethylarginine dimethylaminohydrolase 2	4	0.40	0.170	1.2E-02
P00738	Haptoglobin	5	0.40	0.112	1.2E-03
P07305	Histone H1.0	4	0.39	0.280	3.6E-02
P13871	Complement component C6	4	0.39	0.217	2.5E-02
P62873	Guanine nucleotide-binding protein G(i)(G)(S)(G) subunit beta-1	3	0.37	0.049	2.4E-03
O00159	Unconventional myosin-c	5	0.36	0.081	7.7E-05
P11626	Vinculin	5	0.36	0.098	8.6E-06
P07942	Lamins subunit beta-1	5	0.35	0.228	1.6E-02

Table S16-Average Metastatic Tumors

Q01082	Spectrin beta chain, non-erythrocytic 1	5	0.36	0.125	1.1E-03
Q11813	Spectrin alpha chain, non-erythrocytic 1	5	0.35	0.189	6.2E-04
P00450	Ceruloplasmin	5	0.34	0.250	1.4E-02
O00488	Agrin	4	0.34	0.288	3.4E-02
O75369	Filamin-B	5	0.33	0.143	1.5E-03
P21533	Filamin-A	5	0.32	0.106	4.5E-04
P01011	Alpha-1-antichymotrypsin	5	0.31	0.339	2.7E-02
P08960	Collagen alpha-1(XVIII) chain	5	0.31	0.231	7.0E-03
O15230	Laminin subunit alpha-5	5	0.30	0.208	4.6E-03
P07355	Annexin A2	5	0.30	0.137	9.4E-04
Q13509	Tubulin beta-3 chain	5	0.30	0.262	4.4E-02
Q13425	Beta-2-syntenin	3	0.30	0.055	2.1E-03
P05511	Alpha-crystallin B chain	5	0.30	0.241	7.5E-03
P08493	Topoisomerase alpha-1 chain	5	0.30	0.063	4.2E-05
P02462	Collagen alpha-1(V) chain	4	0.29	0.328	3.3E-02
P27105	Erythrocyte band 7 integral membrane protein	5	0.29	0.278	1.1E-02
Q01995	Transgelin	5	0.28	0.210	3.8E-03
P08294	Extracellular superoxide dismutase (Cu-Zn)	5	0.28	0.138	7.8E-04
P02871	Fibrinogen alpha chain	5	0.28	0.448	4.8E-02
P08572	Collagen alpha-2(V) chain	5	0.28	0.242	6.2E-03
Q06202	Polymerase I and transcript release factor	5	0.28	0.159	1.3E-03
P16157	Ankyrin-1	5	0.27	0.287	1.2E-02
P55288	Laminin subunit beta-2	5	0.27	0.154	1.1E-03
O02852	A-kinase anchor protein 12	5	0.27	0.197	2.7E-03
P50895	Basal cell adhesion molecule	4	0.27	0.069	3.2E-04
O98540	Lactexin	4	0.27	0.385	3.7E-02
Q11642	Four and a half LIM domain protein 1	3	0.27	0.180	1.6E-02
P08160	Basement membrane-specific heparan sulfate proteoglycan core protein	5	0.26	0.169	1.4E-03
O43301	Heat shock 70 kDa protein 1ZA	4	0.26	0.054	1.4E-04
P02549	Spectrin alpha chain, erythrocytic 1	5	0.26	0.246	8.2E-03
O43491	Band 4.1-like protein 2	5	0.25	0.170	1.3E-03
P17661	Desmin	3	0.25	0.194	1.4E-02
Q14624	Inter-alpha-trypsin inhibitor heavy chain H4	3	0.25	0.211	2.3E-02
P80723	Brain acid soluble protein 1	5	0.25	0.181	1.6E-03
Q14699	Raffin	3	0.25	0.143	1.0E-02
P46921	Microtubule-associated protein 1B	5	0.25	0.441	1.0E-02
P11047	Laminin subunit gamma-1	5	0.25	0.206	2.4E-03
P01167	Cytochrome b5	5	0.24	0.081	8.5E-05
P01008	Androstenediol	5	0.24	0.367	1.6E-02
P11277	Spectrin beta chain, erythrocytic	5	0.23	0.297	8.1E-03
Q15363	Laminin subunit alpha-4	5	0.23	0.228	3.0E-03
O96XN1	Asporin	4	0.23	0.351	2.5E-02
P04083	Annexin A1	5	0.23	0.246	3.9E-03
Q14112	Nidogen-2	5	0.23	0.173	1.0E-03
O969G5	Protein kinase C delta-binding protein	4	0.23	0.193	4.5E-03
P96269	Gamma-glutamyltransferase 5	5	0.22	0.169	8.8E-04
C09162	EMILIN-1	5	0.22	0.164	8.0E-04
P02649	Apolipoprotein E	5	0.22	0.337	1.1E-02
P07197	Neurofilament medium polypeptide	5	0.22	0.067	2.2E-05
Q04875	Sorbin and SH3 domain-containing protein 2	5	0.22	0.107	1.4E-04
O16555	Dihydropyrimidinase-related protein 2	5	0.21	0.107	1.4E-04
P14543	Nidogen-1	5	0.188	0.188	1.2E-03
P06903	Protein S100-A10	5	0.21	0.090	8.5E-05
P22105	Tenascin-X	4	0.21	0.200	4.2E-03
P08366	Tubulin alpha-4A chain	3	0.21	0.133	7.5E-03
P07360	Complement component C8 gamma chain	4	0.20	0.194	3.7E-03
O12805	EGF-containing fibulin-like extracellular matrix protein 1	4	0.20	0.335	1.7E-02
P02966	Myosin basic protein	5	0.20	0.110	1.3E-04
P38059	Collagen alpha-1(XV) chain	5	0.19	0.216	1.6E-03
P11168	Solute carrier family 2, facilitated glucose transporter member 1	5	0.18	0.280	3.7E-03
P08032	Actin, alpha cardiac muscle 1	4	0.17	0.188	2.6E-03
P02730	Band 3 anion transport protein	5	0.17	0.391	1.1E-02
P05188	Alkaline phosphatase, tissue-nonspecific isozyme	5	0.17	0.185	6.0E-04
P58166	Inhibin beta E chain	5	0.17	0.196	8.0E-04
O00707	Collagen alpha-1(XIV) chain	5	0.17	0.180	5.7E-04
P04275	von Willebrand factor	5	0.17	0.138	2.0E-04
P43520	Beta-crystallin B2	4	0.16	0.076	1.6E-04
Q13885	Tubulin beta-2A chain	3	0.16	0.334	3.2E-02
Q14495	Lipid phosphate phosphohydrolase 3	4	0.16	0.170	1.7E-03
Q03135	Caveolin-1	5	0.16	0.240	1.6E-03
P02760	Protein AMBP	5	0.16	0.081	2.1E-05
Q15661	Tryptase alpha/beta-1	5	0.15	0.154	0.7E-04
Q2U109	Collagen alpha-1(XCVIII) chain	3	0.15	0.246	1.7E-02
P01871	Ig mu chain C region	5	0.15	0.272	2.2E-03
O96XMO	Fetuin	5	0.15	0.202	7.1E-04
P01031	Complement C5	5	0.15	0.287	2.0E-03
P20774	Nitrican	5	0.15	0.161	2.4E-05
O9L6X5	Fibulin-5	5	0.15	0.280	5.1E-03
P35749	Myosin-11	5	0.14	0.089	2.6E-05
Q24844	Myosin regulatory light polypeptide 9	5	0.14	0.115	7.0E-05
Q14195	Dihydropyrimidinase-related protein 3	5	0.13	0.084	1.9E-05
P21980	Protein-glutamine gamma-glutamyltransferase 2	5	0.13	0.129	8.7E-05
P21810	Blygcan	5	0.13	0.169	2.0E-04
P51884	Lumican	5	0.13	0.178	3.3E-04
P36555	Fibrin-1	5	0.13	0.226	8.3E-04
P21926	C99 antigen	5	0.13	0.245	1.1E-03
O16853	Membrane primary amine oxidase	4	0.12	0.077	1.1E-04
P15909	Claudin-1	5	0.12	0.235	8.5E-04
P51888	Protargin	5	0.12	0.129	7.9E-05
P41219	Perlecan	5	0.12	0.118	5.5E-05
P08123	Collagen alpha-2(I) chain	5	0.12	0.483	1.1E-02
P07585	Decorin	5	0.11	0.183	3.5E-04
P22352	Glutathione peroxidase 3	5	0.11	0.283	1.1E-03
P15588	Mast cell carboxypeptidase A	5	0.11	0.113	3.8E-05
P35625	Metalloproteinase inhibitor 3	5	0.10	0.226	5.6E-04
P02748	Complement component C9	5	0.10	0.202	3.5E-04
P04024	Vitreosin	5	0.10	0.341	2.9E-03
P22748	Carbonic anhydrase 4	5	0.09	0.117	3.5E-05
P22946	Crymase	5	0.09	0.253	6.9E-04
P10745	Retinol-binding protein 3	4	0.08	0.269	2.4E-03
P25189	Myelin protein P0	5	0.07	0.139	4.8E-05
P63211	Guanine nucleotide-binding protein G(T) subunit gamma-T1	3	0.07	0.184	4.4E-03
P02743	Serum amyloid P-component	5	0.07	0.267	5.6E-04

Average LC-MS/MS ITRAQ results from metastasized UM 19, 21, 24, 28, 30. Brown denotes change  $\geq 2$  standard deviations (SD) from the mean, yellow denotes change  $\geq 1$  SD and green highlights p values  $\leq 0.05$ . NA, not applicable, n=3 samples.