

Spot number	Description	UniProt KB entry	Gene name	% of spot volume variation	
				N72L vs K72L	N72H vs K72H
Metabolism					
7	Transketolase	P40142	TKT		- 27
20	Phosphoglycerate kinase 1	P09411	PGK1	50	71
21	Fructose-bisphosphate aldolase A	P05064	ALDOA	60	80
27	Glyceraldehyde-3-phosphate dehydrogenase	P16858	GAPDH	22	44
28	Lactate dehydrogenase A	P06151	LDHA	58	70
41	triosephosphate isomerase 1	P17751	TPI1	64	71
Aminoacid/lipid metabolism					
22	Acetyl-Coenzyme A acetyltransferase 2	Q8CAY6	ACAT2	62	62
23	Acetyl-Coenzyme A acetyltransferase 2	Q8CAY6	ACAT2	32	121
37	Methylthioadenosine phosphorylase	Q9CQ65	MTAP	68	52
Protein synthesis and folding					
5	Glycyl-tRNA synthetase	Q9CZD3	GARS		37
8	Calreticulin	P14211	CALR	- 30	- 39
9	T-complex protein 1 subunit alpha	P11983	TCP1		37
10	Chaperonin containing Tcp1, subunit 5 (epsilon)	P80316	CCT5	40	39
11	Peptidyl-prolyl cis-trans isomerase FKBP4 (FK506-binding protein 4)	P30416	FKBP4	40	49
12	Protein disulfide isomerase associated 4	P09103	PDIA4		- 36
13	Chaperonin containing Tcp1, subunit 2 (beta)	P80314	CCT2		31
17	Eukaryotic translation initiation factor 4A1	Q4FZL1	EIF4A1		38
45	Peptidyl-prolyl cis-trans isomerase A	P17742	PPIA		23
Stress response					
2	Heat shock protein 90, beta (Grp94), member 1	P08113	HSP90B1	21	
6	Stress-70 protein, mitochondrial	P38647	HSPA9		- 10
19	Serine (or cysteine) peptidase inhibitor, clade B, member 6a	Q60854	SERPINB6A	- 26	- 32
30	Esterase D/formylglutathione hydrolase	Q9R0P3	ESD	87	49
33	Proteasome (prosome, macropain) subunit, alpha type 1	Q9R1P4	PSMA1	27	
34	Glutathione S-transferase omega 1	O09131	GSTO1	79	57
39	Peroxiredoxin 4	O08807	PRDX4		33
40	Peroxiredoxin 6	O08709	PRDX6	37	
43	Superoxide dismutase [Mn], mitochondrial	P09671	SOD2	51	30
44	Peroxiredoxin 1	P35700	PRDX1	45	35
Structural proteins					
1	Vinculin	Q64727	VCL	- 62	- 50
3	Gelsolin	P13020	GSN	- 41	- 54
4	Gelsolin	P13020	GSN	- 48	- 53
15	Vimentin	P20152	VIM	69	39
16	Vimentin	P20152	VIM	106	124
18	Vimentin	P20152	VIM	125	183
36	Lectin, galactose binding, soluble 3	Q8C253	LGALS3		- 31
Other					
14	RuvB-like protein 2	Q9WTM5	RUVBL2		57
24	Protein phosphatase 1, catalytic subunit, alpha isoform	P62137	PPP1CA		27
25	Annexin A1 (Lipocortin I)	P10107	ANXA1	- 23	
26	Annexin A3	O35639	ANXA3	- 59	- 52
29	Annexin A5	P48036	ANXA5	65	84
31	Voltage-dependent anion channel 1	Q60932	VDAC1		- 25
32	Guanine nucleotide binding protein (G protein), beta polypeptide 2 like 1 (Gnb2l1), mRNA	P68040	GNB2L1		16
35	Chloride intracellular channel 1	Q9Z1Q5	CLIC1		46
38	Proteasome subunit alpha type-4	Q9R1P0	PSMA4		19
42	RAN GTPase activating protein 1	P62826	RANGAP1	40	40

Supplementary Table 4

KEGG pathway classification of identified proteins. The two columns on the right indicate the percentage of protein spot variation as measured on 2-DIGE gels.