

Table 1. Differentially expressed proteins identified in IM cross-resistance. Proteins were separated into biological functions according to GO analysis. Information regarding pI/MW, statistical and Mascot score, number of identified peptides, peptide sequence and sequence coverage were described.

Identified Protein	Accession Number ^a	Theoretical pI/MW	Experimental pI/MW	Statistical Score p<0.05	Mascot Score	N° of Unique Peptides	Peptides Sequence	Sequence Cov. (%) ^b
<i>Structural Proteins</i>								
<i>INCREASE</i>								
MSN Moesin	IPI00219365	6.08 / 67892	6.5 / 83488	33	70	3	R.IQVWHEEHR.G K.IGFPWSEIR.N K.APDFVFYAPR.L	4
RPSA 33 kDa protein	IPI00413108	4.79 / 33464	4.81 / 48765	32	255	6	K.FLAAGTHLGGTNLDFQMEQYIYK.R Oxidation (M) R.AIVAIENPADVSVISSR.N K.FAAATGATPIAGR.F R.FTPGTFTNQIAAFR.E R.ADHQPLTEASYVNLPTIALCNTDSPLR.Y K.GAHSVGLMWWMLAR.E 2 Oxidation (M)	36
ACTB Actin, cytoplasmic 1	IPI00021439	5.29 / 42052	5.41 / 46719	33	225	5	R.VAPEEHPVLLTEAPLNPK.A K.SYELPDGQVITIGNER.F K.DLYANTVLSGGTTMYPGIADR.M K.DLYANTVLSGGTTMYPGIADR.M Oxidation (M) K.QEYDESGPSIVHR.K	18
<i>DECREASE</i>								
LCP1 Plastin-2	IPI00010471	5.2 / 70815	5.37 / 75973	33	36	2	K.IGLFADIELSR.N K.LNLAFIANLFNR.Y	3

*Stress Response / Chaperone**INCREASE*

HSP90B1 Endoplasmin precursor	IPI00027230	4.76 / 92696	4.87 / 116504	33	139	4	K.FAFQAEVNR.M K.SILFVPTSAPR.G R.GLFDEYGSK.K K.GVVDSDDLPLNVS.R	5
HSPB1 Heat shock protein beta-1	IPI00025512	5.98 / 22826	6.21 / 27565	33	142	3	R.GPSWDPFR.D R.LFDQAFGLPR.L R.VSLDVNHFAPDELT.VK.T	16
HSP90AB1 Heat shock protein HSP 90-beta	IPI00414676	4.97 / 83554	5.05 / 99183	33	225	5	K.IDIIPNPQER.T K.HFSVEGQLEFR.A R.RAPFDLFENK.K R.GVVDSDDLPLNISR.E K.HLEINPDHPIVETLR.Q	8
HYOU1 Hypoxia up-regulated protein 1 precursor	IPI00000877	5.16 / 111494	5.28 / 176811	32	131	6	K.DAVITVPVFFNQAER.R K.VLQLINDNTATALS.YGVFR.R R.LAGLFNEQR.K R.VEFEELCADLFR.V R.DAVVYPILVEFTR.E K.AHFNLDSESGVLSLDR.V	8
VCP Transitional endoplasmic reticulum ATPase	IPI00022774	5.14 / 89950	5.34 / 107671	32	140	7	K.VVETDPSPYCIVAPDTVIHCEGEPIK.R R.EDEEESLNEVG.YDDIGGCR.K R.WALSQSNPSALR.E R.ETVVEVPQVTWEDIGGLEDVKR.E R.ELQELVQYPVEHPDK.F K.GVLFYGPPEGCGK.T K.GPELLTMWFGES.EANVR.E Oxidation (M)	15

DECREASE

HSP90AB1 Heat shock protein HSP 90-beta	IPI00414676	4.97 / 83554	5.32 / 99183	33	212	7	K.HNDDEQYAWESSAGGSFTVR.A K.EDQTEYLEER.R K.HSQFIGYPITLYLEK.E K.SLTNDWEDHLAVK.H K.HFSVEGQLEFR.A R.RAPFDLFENK.K K.HLEINPDHPIVETLR.Q	12
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Nucleic Acid Binding, Synthesis, Stability

INCREASE								
AARS Alanyl-tRNA synthetase, cytoplasmic	IPI00027442	5.34 / 107484	5.46 / 124738	33	76	2	K.VGDQVWLFIDEPR.R R.AVFEDETYPDPVR.V	2
RPA3 Replication protein A 14 kDa subunit	IPI00017373	4.96 / 13674	4.96 / 15250	33	54	2	K.EDSHPFDLGLYNEAVK.I K.IIHDFPQFYPLGIVQHD. -	27
RBM17 Splicing factor 45	IPI00176706	5.76 / 45162	5.73 / 57718	33	99	3	R.DFPYEEDSRPR.S K.CVIFEIPGAPDDEAVR.I R.IFLEFER.V	3
LRPPRC Leucine-rich PPR motif-containing protein, mitochondrial precursor	IPI00783271	5.81 / 159003	5.86 / 156498	61	62	11	R.LQWFCDR.C K.FSPTDFLAK.M K.ALYEHLTAK.N K.AGYPQYVSEILEK.V R.NLLESYHVPELIK.D K.LGAVYDVSHYNALLK.V R.AGDMENAENILTVMR.D K.VIEPQYFGLAYLFR.K K.DLPVTEAVFSALVTGHAR.A K.EQNIVFNAETYSNLIK.L K.TKDLPVTEAVFSALVTGHAR.A	11

DECREASE

LSM2 U6 snRNA-associated Sm-like protein LSm2	IPI00032460	6.04 / 10942	6.45 / 13810	32	154	2	K.NDLSICGTLHSVDQYLNK.L R.YVQLPADEVDTQLLQDAAR.K	48
HNRNPF Heterogeneous nuclear ribonucleoprotein F	IPI00003881	5.38 / 45985	5.49 / 51668	32	102	2	K.ITGEAFVQFASQELA EK.A K.ATENDIYNFFSPLNPVR.V	8
HNRNPC Isoform C1 of Heterogeneous nuclear ribonucleoproteins C1/C2	IPI00216592	4.94 / 32375	5.11 / 44759	33	105	2	K.GFAFVQYVNER.N R.VPPPPPIAR.A	6

Protein Binding and Synthesis

INCREASE

EIF3K Eukaryotic translation initiation factor 3 subunit K	IPI00033143	4.81 / 25329	4.92 / 25554	32	37	2	R.YNPENLATLER.Y K.FICHVVGITYQHIDR.W	11
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DECREASE

EIF1AY Eukaryotic translation initiation factor 1A, Y-chromosomal	IPI00232533	5.07 / 16546	5.28 / 19934	33	142	3	K.KVWINTSDIILVGLR.D K.VWINTSDIILVGLR.D K.AYGELPEHAK.I	17
RPS12 ribosomal protein S12	IPI00847579	6.81 / 14905	6.67 / 15920	33	80	2	K.LVEALCAEHQINLIK.V K.DVIEEYFK.C	17
HINT1 Histidine triad nucleotide-binding protein 1	IPI00239077	6.43 / 13907	6.64 / 15402	32	102	4	K.AQVARPGGDTIFGK.I R.CLAFHDISPQAPTHFLVIPK.K R.MVVNEGSDGGQSVYHVHLHVLGGR.Q R.MVVNEGSDGGQSVYHVHLHVLGGR.Q Oxidation (M)	46

Metabolism

INCREASE

ARG2 Arginase-2, mitochondrial precursor	IPI00020332	6 / 38839	5.75 / 43188	32	37	3	K.DDLYNNLIVNPR.S R.SVGLANQELAEVVS.R K.TTANLAVDVIASSFGQTR.E	12
COX6B1 Cytochrome c oxidase subunit VIb isoform 1	IPI00216085	6.54 / 10414	6.09 / 14087	33	100	4	R.FPNQNQTR.N R.NCWQNYLDFHR.C K.GGDISVCEWYQR.V	47

CKB Creatine kinase B-type		IPI00022977	5.34 / 42902	5.68 / 46386	33	38	3	R.VYQSLCPTSWVTDWDEQR.A R.GFCLPPHCSR.G K.LAVEALSSLDGDLAGR.Y K.TFLVWVNEEDHLR.V	10
DECREASE									
ATP5B ATP synthase subunit beta, mitochondrial precursor		IPI00303476	5.26 / 56525	5.11 / 56085	33	493	9	R.LVLEVAQHLGESTVR.T K.IPVGPETLGR.I K.AHGGYSVFAGVGER.T K.VALVYQMNEPPGAR.A K.VALVYQMNEPPGAR.A Oxidation (M) R.VALTGLTVAEYFR.D R.DQEGQDVLLFIDNIFR.F R.AIAELGIYPAVDPLDSTSR.I R.IMDPNIVGSEHYDVAR.G Oxidation (M)	22
TPI1 Isoform 1 of Triosephosphate isomerase		IPI00465028	5.65 / 31057	6.6 / 27442	33	236	6	K.FFVGGNWK.M K.VPADTEVVCAPPTAYIDFAR.Q K.DCGATWVVLGHSE.R R.RHVFGESDELIGQK.V K.VVLAYEPVWAIGTGK.T K.ELASQPDVDGFLVGGASLKPEFVDIINAK.Q	34
Signaling Transduction									
INCREASE									
SH3BGRL SH3 domain-binding glutamic acid-rich-like protein		IPI00025318	5.22 / 12766	5.43 / 15815	33	74	2	R.GDYDAFFEAR.E R.ENNAVYAFLGLTAPPGSK.E	24
TXNDC17 Thioredoxin domain-containing protein 17		IPI00646689	5.4 / 14217	5.41 / 15607	33	46	3	R.YEEVSVSGFEEFHR.A K.TIFAYFTGSK.D K.SWCPDCVQAEPVVR.E	30
GMFB GMFB protein		IPI00412987	5.21 / 18326	5.32 / 19921	33	115	3	R.LVVLDEELEGISPDELKDELPER.Q	26

CAPNS1 Calpain small subunit 1	IPI00025084	5.05 / 28469	5.04 / 30107	33	126	5	R.FIVYSYK.Y	27
							R.NTEDLTEEWLR.E	
							R.ILGGVISAISEAAAQYNPEPPPPR.T	
							R.THYSNIEANESEEV.R.Q	
							K.TDGFIDTCR.S	
DECREASE							K.YLWNNIK.R	
							R.YSDESGNMDFDNFISCLVR.L	
							Oxidation (M)	
STRAP Serine-threonine kinase receptor-associated protein	IPI00294536	4.98 / 38756	5.13 / 44724	33	56	2	K.SFEAPATINSASLHPEK.E	10
							R.FSPDGELYASGSEDGTLR.L	
Cell cycle/ Proliferation								
INCREASE								
MCM7 Isoform 1 of DNA replication licensing factor MCM7	IPI00299904	6.08 / 81884	6.48 / 92125	33	60	5	R.IAQPGDHVSVTGIFLPILR.T	10
							K.ALLLLLVGGVDQSPR.G	
							R.SLEQNIQLPAALLSR.F	
							R.LAQHITYVHQHSR.Q	
							R.TQRPADVIFATVR.E	
S100A11 Protein S100-A11	IPI00013895	6.56 / 11847	6.09 / 14087	33	51	2	K.TEFLSFMNTELA AFTK.N	15
							K.TEFLSFMNTELA AFTK.N	
Oxidation (M)								
Unknown								
DECREASE								
C19orf10 UPF0556 protein precursor	C19orf10 IPI00056357	6.2 / 18897	6.63 / 16785	32	52	2	K.SYLYFTQFK.A	13
							R.ESDVPLKTEEFVTK.T	
MTPN Myotrophin	IPI00179589	5.92 / 14508	5.2 / 14754	32	226	3	K.GADINAPDKHHITPLLSAVYEGHVSCVK.L	34
							K.HHITPLLSAVYEGHVSCVK.L	
							K.GPDGLTAFEATDNQAIA.A	
C1QBP Complement component 1 Q subcomponent-binding protein, mitochondrial	IPI00014230	4.74 / 31742	4.42 / 31654	32	105	3	K.AFVDFLSDEIKEER.K	21
							K.VEEQEPELTSTPNFVVEVIK.N	

K.ALVLDCHYPEDEVGQEDEAESDIFSIR.E

^a Accession numbers of protein were derived from the International Protein Index (IPI) database.

^b Protein's sequence coverage by peptide identification.