

Supplementary Table 3. Protein identification details of cardiac protein targets of autoantibodies detected by 2-D Western Blot in serum of A.BY/SnJ mice

Label	Protein ID	Protein Name	Accession Number	Protein MW	Protein PI	Peptide Count	Protein Score
BA_100	DESM	Desmin	IPI00130102	53334.00	5.21	41	885
BA_101	SYDC	Aspartyl-tRNA synthetase	IPI00122743	57081.17	6.07	31	497
BA_102	DESM	Desmin	IPI00130102	53334.00	5.21	28	658
BA_105	MYH6	Myosin heavy chain, cardiac muscle alpha isoform	IPI00129404	223426.47	5.57	32	227
BA_109	ODPX	Pyruvate dehydrogenase protein X component, mitochondrial	IPI00222767	53965.23	7.63	20	449
BA_110	ATPB	ATP synthase beta chain, mitochondrial	IPI00468481	56265.46	5.19	25	709
BA_111	ATPB	ATP synthase beta chain, mitochondrial	IPI00468481	56265.46	5.19	12	265
BA_112	ODO2	Dihydrolipoyllysine-residue succinyltransferase component of 2- oxoglutarate dehydroge	IPI00134809	48963.48	9.11	19	447
BA_114	ALDH2	Aldehyde dehydrogenase, mitochondrial	IPI00111218	56501.75	7.53	25	254
BA_115	UQCR1	Ubiquinol-cytochrome-c reductase complex core protein I, mitochondrial	IPI00111885	52735.43	5.75	27	668
BA_118	UQCR1	Ubiquinol-cytochrome-c reductase complex core protein I, mitochondrial	IPI00111885	52735.43	5.75	20	423
BA_120	ENOA	Alpha-enolase	IPI00462072	46980.17	6.36	15	316
BA_120	EF1G	Elongation factor 1-gamma		49898.12	6.33		
BA_122	Q9CXK3	Actin, alpha, cardiac	IPI00480406	41919.86	5.3	22	621
BA_123	NDUS2	NADH-ubiquinone oxidoreductase 49 kDa subunit, mitochondrial	IPI00128023	52591.65	6.52	29	374
BA_124	EFTU	Splice Isoform 1 of Elongation factor Tu, mitochondrial	IPI00274407	49476.97	7.23	29	753
BA_126	Q9CXK3	Actin, alpha, cardiac	IPI00480406	41919.86	5.3	24	620
BA_127	Q9CXK3	Actin, alpha, cardiac	IPI00480406	41919.86	5.3	21	563
BA_128	Q9CXK3	Actin, alpha, cardiac	IPI00480406	41919.86	5.3	17	471
BA_129	SUCB1	Succinyl-CoA ligase [ADP-forming] beta-chain, mitochondrial	IPI00261627	50082.13	6.57	30	522
BA_130	Q3T9C9	Mitochondrial acyl-CoA thioesterase 1	IPI00653566	49625.73	6.88	18	388
BA_132	MANA	Mannose-6-phosphate isomerase	IPI00125807	46544.73	5.62	10	169

BA_133	ACADL	Long-chain specific acyl-CoA dehydrogenase, mitochondrial	IPI00119114	47877.49	8.53	19	241
BA_135	TNNT2	Splice Isoform A1 of Troponin T, cardiac muscle	IPI00336918	34823.70	5.16	16	475
BA_136	TNNT2	Splice Isoform A1 of Troponin T, cardiac muscle	IPI00336918	34823.70	5.16	16	463
BA_139	IDH3A	Isoform 1 of Isocitrate dehydrogenase [NAD] subunit alpha, mitochondrial	IPI00459725	39613.06	6.27	15	182
BA_143	LDHB	L-lactate dehydrogenase B chain	IPI00229510	36417.99	5.7	24	491
BA_144	TPM1	Splice Isoform 1 of Tropomyosin 1 alpha chain	IPI00123316	32660.67	4.69	18	260
BA_145	ODPB	Pyruvate dehydrogenase E1 component beta subunit, mitochondrial	IPI00132042	38912.02	6.41	18	477
BA_146	MDHC	Malate dehydrogenase, cytoplasmic	IPI00336324	36323.05	6.16	14	406
BA_149	PHB	Prohibitin	IPI00133440	29801.90	5.57	6	38
BA_151	NDUS3	NADH-ubiquinone oxidoreductase 30 kDa subunit, mitochondrial	IPI00121309	30188.54	6.4	15	490
BA_154	PRDX3	Thioredoxin-dependent peroxide reductase, mitochondrial	IPI00116192	28109.41	7.15	11	221
BA_16	Q9JHW2	Nit protein 2	IPI00119945	30482.60	6.44	14	214
BA_17	MYH6	Myosin-6	IPI00129404	223426.47	5.57	28	156
BA_18	MYH6	Myosin-6	IPI00129404	223426.47	5.57	24	81
BA_20	MYH6	Myosin-6	IPI00129404	223426.47	5.57	22	112
BA_21	MYH6	Myosin-6	IPI00129404	223426.47	5.57	24	109
BA_23	Q5FW75	Actinin alpha 2	IPI00387557	103768.32	5.31	28	163
BA_25	Q5FW75	Actinin alpha 2	IPI00387557	103768.32	5.31	31	219
BA_26	Q5FW75	Actinin alpha 2	IPI00387557	103768.32	5.31	31	191
BA_31	MYH6	Myosin-6	IPI00129404	223426.47	5.57	22	108
BA_32	MYH6	Myosin-6	IPI00129404	223426.47	5.57	24	123
BA_33	MYH6	Myosin-6	IPI00129404	223426.47	5.57	21	91
BA_35	MYH6	Myosin-6	IPI00129404	223426.47	5.57	25	92
BA_41	MYH6	Myosin-6	IPI00129404	223426.47	5.57	21	115
BA_43	Q3TLV2	TRANSGLUTAMINASE 2, C POLYPEPTIDE	IPI00387333	77026.31	5.02	32	524

BA_44	NDUS1	NADH-ubiquinone oxidoreductase 75 kDa subunit, mitochondrial	IPI00308882	79697.54	5.51	43	653
BA_50	MYH6	Myosin-6	IPI00129404	223426.47	5.57	35	213
BA_56	GRP75	Stress-70 protein, mitochondrial	IPI00133903	73482.73	5.91	18	327
BA_62	ALBU	Serum albumin	IPI00131695	68647.71	5.75	22	445
BA_63	IMMT	Isoform 2 of Mitochondrial inner membrane protein	IPI00381412	82877.69	6.18	32	495
BA_69	DHSA	Succinate dehydrogenase [ubiquinone] flavoprotein subunit, mitochondrial	IPI00230351	72539.17	7.06	40	778
BA_71	MYH6	Myosin heavy chain, cardiac muscle alpha isoform	IPI00129404	223426.47	5.57	36	390
BA_72	#NV	PREDICTED: similar to heat shock protein 8	IPI00753407	76463.24	5.7	31	775
BA_74	ODP2	Dihydrolipoyllysine-residue acetyltransferase component of pyruvate dehydrogenase complex, mitochondrial	IPI00153660	67902.67	8.81	25	499
BA_76	MYH6	Myosin-6	IPI00129404	223426.47	5.57	24	89
BA_80	#NV	222 kDa protein	IPI00122737	222236.98	5.61	0	0
BA_81	MYH6	Myosin-6	IPI00129404	223426.47	5.57	24	158
BA_85	ETFD	Electron transfer flavoprotein-ubiquinone oxidoreductase, mitochondrial	IPI00121322	68047.61	7.34	16	279
BA_87	EHD1	EH domain-containing protein 1	IPI00126083	60564.63	6.35	25	189
BA_91	TBA2	Tubulin alpha-2 chain	IPI00117348	50119.60	4.94	20	210
BA_94	DLDH	DIHYDROLIPOYL DEHYDROGENASE	IPI00331564	54564.32	7.25	19	241
BA_97	TBB5	Tubulin beta-5 chain	IPI00117352	49638.97	4.78	30	488
BA_99	ATPB	ATP synthase beta chain, mitochondrial	IPI00468481	56265.46	5.19	28	755
BB_17	ACON	Aconitate hydratase, mitochondrial	IPI00116074	85410.02	8.08	41	809
BB_18	ACON	Aconitate hydratase, mitochondrial	IPI00116074	85410.02	8.08	38	743
BB_19	ACON	Aconitate hydratase, mitochondrial	IPI00116074	85410.02	8.08	39	739
BB_21	TRFE	Serotransferrin	IPI00139788	76673.72	6.94	47	724
BB_22	Q3TB39	Hydroxyacyl-Coenzyme A dehydrogenase/3-ketoacyl-Coenzyme A thiolase/enoyl-Coenzyme A h	IPI00223092	82591.41	9.24	40	713
BB_25	DHSA	Succinate dehydrogenase [ubiquinone] flavoprotein subunit, mitochondrial	IPI00230351	72539.17	7.06	32	592

BB_26	EHD4	EH-domain containing 4-KJR (Fragment)	IPI00318671	61612.54	6.33	32	471
BB_27	ACADV	Very-long-chain specific acyl-CoA dehydrogenase, mitochondrial	IPI00119203	70953.79	8.91	40	851
BB_28	ETFD	Electron transfer flavoprotein-ubiquinone oxidoreductase, mitochondrial	IPI00121322	68047.61	7.34	29	604
BB_29	PGM1	Phosphoglucumutase-1	IPI00555140	61347.63	6.32	26	362
BB_31	KPYM	Pyruvate kinase isozyme M2	IPI00407130	57966.07	7.18	29	333
BB_35	DLDH	Dihydrolipoyl dehydrogenase, mitochondrial	IPI00115569	54178.13	7.97	21	487
BB_38	ATPA	ATP synthase subunit alpha, mitochondrial	IPI00130280	59715.59	9.22	36	813
BB_39	ATPA	ATP synthase subunit alpha, mitochondrial	IPI00130280	59715.59	9.22	36	795
BB_41	ATPA	ATP synthase subunit alpha, mitochondrial	IPI00130280	59715.59	9.22	36	795
BB_42	ATPA	ATP synthase subunit alpha, mitochondrial	IPI00130280	59715.59	9.22	34	655
BB_44	EF1A2	Elongation factor 1-alpha 2	IPI00119667	50422.31	9.11	18	278
BB_45	NDUV1	NADH dehydrogenase [ubiquinone] flavoprotein 1, mitochondrial	IPI00130460	50801.72	8.51	28	598
BB_46	ENOB	Beta-enolase	IPI00228548	46864.26	6.81	29	561
BB_47	ECHB	Trifunctional enzyme subunit beta, mitochondrial	IPI00115607	51584.51	9.43	31	547
BB_48	FUMH	Isoform Cytoplasmic of Fumarate hydratase, mitochondrial	IPI00759940	50034.68	7.75	20	472
BB_50	FUMH	Isoform Cytoplasmic of Fumarate hydratase, mitochondrial	IPI00759940	50034.68	7.75	23	511
BB_51	ODPA	Pyruvate dehydrogenase E1 component alpha subunit, somatic form, mitochondrial precurs	IPI00337893	43203.63	8.49	30	507
BB_52	EFTU	Isoform 1 of Elongation factor Tu, mitochondrial	IPI00274407	49476.97	7.23	28	780
BB_53	#NV	Isoform 1 of Isocitrate dehydrogenase [NADP], mitochondrial	IPI00798455	58734.79	8.56	32	372
BB_54	KCRS	Creatine kinase, sarcomeric mitochondrial	IPI00120076	47443.32	8.64	28	601

BB_55	Q3TIT9	Acetyl-Coenzyme A acyltransferase 2 (mitochondrial 3-oxoacyl-Coenzyme A thiolase)	IPI00653158	41803.44	8.33	26	511
BB_56	UQCR2	Ubiquinol-cytochrome-c reductase complex core protein 2, mitochondrial	IPI00119138	48205.01	9.26	19	430
BB_57	UQCR2	Ubiquinol-cytochrome-c reductase complex core protein 2, mitochondrial	IPI00119138	48205.01	9.26	16	465
BB_59	ACADL	Long-chain specific acyl-CoA dehydrogenase, mitochondrial	IPI00119114	47877.49	8.53	27	454
BB_60	PGK1	Phosphoglycerate kinase 1	IPI00230002	44521.98	8.02	16	267
BB_61	ACADM	Medium-chain specific acyl-CoA dehydrogenase, mitochondrial	IPI00134961	46451.62	8.6	27	533
BB_63	KCRM	Creatine kinase M-type	IPI00127596	43017.80	6.58	29	627
BB_64	THIL	Acetyl-CoA acetyltransferase, mitochondrial	IPI00154054	44787.34	8.71	18	222
BB_65	AATM	Aspartate aminotransferase, mitochondrial	IPI00117312	47381.21	9.13	27	567
BB_68	IDH3G	Isocitrate dehydrogenase [NAD] subunit gamma, mitochondrial	IPI00109169	42758.17	9.17	16	484
BB_69	ALDOA	Fructose-bisphosphate aldolase A	IPI00221402	39200.23	8.39	26	535
BB_70	AATC	Aspartate aminotransferase, cytoplasmic	IPI00230204	46071.44	6.75	27	599
BB_71	Q91VA7	Tumor-related protein	IPI00126635	42167.65	8.76	19	158
BB_72	Q91W85	Acyl-Coenzyme A dehydrogenase, short chain	IPI00331251	44861.10	8.68	19	474
BB_73	G3P	Glyceraldehyde-3-phosphate dehydrogenase	IPI00273646	35656.17	8.45	22	515
BB_74	MDHM	Malate dehydrogenase 2, NAD	IPI00331590	35588.76	8.93	25	747
BB_75	G3P	Glyceraldehyde-3-phosphate dehydrogenase	IPI00273646	35656.17	8.45	16	286
BB_76	ALDR	Aldose reductase	IPI00223757	35578.41	6.79	18	457
BB_77	ANXA2	Annexin A2	IPI00468203	38520.80	7.53	24	616
BB_78	FHL2	Four and a half LIM domains protein 2	IPI00118205	32050.53	7.31	31	498
BB_79	HCDH	Hydroxyacyl-coenzyme A dehydrogenase, mitochondrial	IPI00121105	34441.88	8.76	18	376

BB_80	VDAC1	Isoform Mt-VDAC1 of Voltage-dependent anion-selective channel protein 1	IPI00230540	30736.57	8.62	22	681
BB_82	ETFA	ELECTRON TRANSFER FLAVOPROTEIN SUBUNIT ALPHA, MITOCHONDRIAL	IPI00607901	35015.55	8.77	24	573
BB_83	ETFA	Electron transferring flavoprotein, alpha polypeptide	IPI00607901	35015.55	8.77	16	552
BB_84	Q8C2Q8	ATP SYNTHASE, H+ TRANSPORTING, MITOCHONDRIAL F1 COMPLEX, GAMMA POLYPEPTIDE 1	IPI00750074	30236.80	8.86	15	492
BB_85	Q8C253	LECTIN, GALACTOSE BINDING, SOLUBLE 3	IPI00224486	27397.50	8.57	10	343
BB_86	ETFB	Electron transfer flavoprotein subunit beta	IPI00121440	27474.94	8.29	16	581
BB_87	Q8QZV3	Dodecenoyl-Coenzyme A delta isomerase	IPI00331692	32229.80	9.12	18	323
BB_88	PGAM2	Phosphoglycerate mutase 2	IPI00230706	28808.84	8.65	15	297
BB_89	DHSB	Succinate dehydrogenase [ubiquinone] iron-sulfur protein, mitochondrial	IPI00338536	31792.89	8.96	14	160
BB_91	UCRI	Ubiquinol-cytochrome c reductase iron-sulfur subunit, mitochondrial	IPI00133240	29349.20	8.91	14	335
BB_93	ES1	ES1 protein homolog, mitochondrial	IPI00133284	28072.78	9	12	299
BB_95	ATPO	ATP synthase O subunit, mitochondrial	IPI00118986	23348.74	10	10	108
BB_96	not identified						
BB_67	not identified						
BB_101	not identified						
BB_102	not identified						
BB_105	not identified						
BB_106	not identified						
BB_107	not identified						
BB_108	not identified						
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BB_110	not identified						
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BB_115	not identified						

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BA_167	not identified
BA_168	not identified
BA_169	not identified
BA_170	not identified
BA_171	not identified
BA_172	not identified
BA_173	not identified
BA_174	not identified

BA spots in pI range 4-7

BB spots in pI range 6-11