Supporting Information (SI)

Hydroxylamine Chemical Digestion for Insoluble Extracellular Matrix Characterization

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Table of Contents:

Supplementary Table S1 – Observed hydroxylamine cleavage results

Supplementary Table S2 – LC-SRM individual protein results

Supplementary Table S3 – Fold change analysis of ECM protein groups from LC-SRM data

Supplementary Table S4 – Data-dependent LC-MS/MS results

Supplementary Table S5 – Protein and peptide identifications from data-dependent LC-MS/MS experiments

Supplementary Figure S1 – Cyanogen bromide and hydroxylamine reaction mechanisms

Supplementary Figure S2 – Error Tolerant Search Results from LC-MS/MS data

Supplementary Table S1 – Observed NH_2OH cleavage results

Peptide N-term Cleavage Site					Peptide C-term Cleavage Site	
All peptides N-terminal cleavage at P1	# Observations	P1' Occurance when P1 = N	# Observations	Ratio NG/NX	Position P1	# Observations
K	9578	G	314	1	K	10081
R	9849	A	246	1.28	R	11063
N	1534	S	155	2.03	N	79
A	0	E	119	2.64	A	0
D	0	P	104	3.02	D	0
E	0	L	97	3.24	E	0
F	0	D	90	3.49	F	0
G	0	K	88	3.57	G	1
H	0	V	67	4.69	H	0
I	0	T	58	5.41	I	1
L	0	Q	36	8.72	L	5
M*	86	M	33	9.52	M	4
Q	0	R	26	12.08	Q	0
P	0	I	25	12.56	P	3
S	0	F	18	17.44	S	0
T	0	W	18	17.44	T	0
W	0	H	17	18.47	W	0
Y	0	N	15	20.93	Y	0
V	0	Y	8	39.25	V	0
C	0	C	0	0.00	C	0

* exclusively protein N-termini

Supplementary Table S2 – LC-SRM individual protein results

				Quantified protein (fmol/mg)					
Bone				***CNBr***			***NH_2OH***		
Protein	**Functional**	**Matrisome**	**Gene**	*Femur 1*	*Femur 2*	*Femur 3*	*Femur 1*	*Femur 2*	*Femur 3*
Actin (All Isoforms)	Cytoskeletal	Cellular	act	99.3	58.7	80.3	434.3	504.8	389.1
Actin, cytoplasmic 1/2	Cytoskeletal	Cellular	actb	20.0	14.7	14.3	46.6	13.7	17.8
Desmin	Cytoskeletal	Cellular	des	5.6	5.8	5.8	11.3	12.4	9.4
Tubulin beta-4B chain(4b & 5 chain)	Cytoskeletal	Cellular	tubb	2.1	1.8	2.2	19.2	11.7	13.6
Vimentin	Cytoskeletal	Cellular	vim	9.6	9.1	7.7	21.4	8.3	11.9
Collagen alpha-1(I) chain	Fibrillar Collagen	Collagen	col1a1	14058.4	13651.5	11625.5	8475.9	7874.2	9002.4
Collagen alpha-1(IV) chain(Arresten/Core Protein)	Basement Membrane	Collagen	col4a1	7.5	11.2	9.9	17.0	18.5	26.3
Collagen alpha-1(VI) chain	Structural ECM	Collagen	col6a1	234.1	218.2	233.5	185.5	98.7	126.1
Collagen alpha-1(XIV) chain	FACIT Collagen	Collagen	col14a1	7.5	6.1	6.5	14.5	8.6	9.5
Collagen alpha-2(I) chain	Fibrillar Collagen	Collagen	col1a2	7502.3	7478.5	6145.2	6442.9	4875.2	7248.7
Collagen alpha-2(IV) chain(Canstatin/Core Protein)	Basement Membrane	Collagen	col4a2	10.5	6.6	8.6	20.0	16.8	20.3
Collagen alpha-2(V) chain	Fibrillar Collagen	Collagen	col5a2	116.9	108.5	73.9	97.4	71.8	98.4
Collagen alpha-2(VI) chain	Structural ECM	Collagen	col6a2	316.1	229.0	191.7	259.7	128.8	201.1
Collagen alpha-3(VI) chain	Structural ECM	Collagen	col6a3	325.1	275.6	269.2	248.5	135.9	212.5
Dermatopontin	Structural ECM	Glycoprotein	dpt	2.5	1.9		1.9	1.7	2.1
Emilin 1	Structural ECM	Glycoprotein	emilin1	2.3	2.2	2.2	3.4	1.7	2.5
Fibrillin 1	Structural ECM	Glycoprotein	fbn1	4.9	2.3	11.9	27.1	17.9	35.3
Fibronectin 1(type-III 7 domain)	Structural ECM	Glycoprotein	fn1	88.6	70.8	62.0	209.6	90.0	
Fibronectin 1(type-III 9 domain)	Structural ECM	Glycoprotein	fn1	12.0		11.5	132.3	50.6	48.1
Laminin alpha-2	Basement Membrane	Glycoprotein	lama2	1.6	1.4	1.6	3.7	3.8	4.5
Matrilin 1, Cartilage Matrix Protein	Structural ECM	Glycoprotein	matn1	14.6	5.4	5.4	34.7	1.8	3.4
Periostin	Matricellular	Glycoprotein	postn	27.1	64.0	31.5	16.2	15.1	19.7
Biglycan	Structural ECM	Proteoglycan	bgn	97.5	55.7	67.5	52.8	14.4	17.6
Bone Marrow Proteoglycan(BMP & Eosinophil granule m	Other ECM	Proteoglycan	prg2	2.3	1.1	1.6	25.8	13.1	16.8
Lumican	Structural ECM	Proteoglycan	lum	12.2	10.5	10.0	5.6	3.2	4.6
Mimecan/Osteoglycin	Other ECM	Proteoglycan	ogn	6.1	7.8	8.4	14.3	10.9	11.8
Perlecan	Basement Membrane	Proteoglycan	hspg2	42.1	25.3	33.2	57.5	21.1	23.0
	Total Quantified Protein (fmol/mg)			23028.7	22323.6	18921.1	16879.1	14024.6	17576.6

				Quantified protein (fmol/mg)					
Skin				***CNBr***			***NH_2OH***		
Protein	**Functional**	**Matrisome**	**Gene**	*Skin 1*	*Skin 2*	*Skin 3*	*Skin 1*	*Skin 2*	*Skin 3*
Actin (All Isoforms)	Cytoskeletal	Cellular	act	77.3	18.6	54.1	211.1	150.8	199.6
Actin, cytoplasmic 1/2	Cytoskeletal	Cellular	actb	42.5	32.1	2.3	41.3	87.6	65.3
Desmin	Cytoskeletal	Cellular	des	2.0	1.0	3.1	3.3	1.9	3.3
Histone 2A(H2A-A-K)	Other Cellular	Cellular	h2a	43.0	41.3	10.6	28.4	36.6	54.8
Histone H1(H1.1,H1.2,H1.3,H1.4)	Other Cellular	Cellular	h1	32.5	29.9	9.9	51.1	47.2	59.6
Tubulin beta-4B chain(4b & 5 chain)	Cytoskeletal	Cellular	tubb	2.7	0.8	27.0	12.7	16.4	14.8
Vimentin	Cytoskeletal	Cellular	vim	8.6	7.9	8.1	3.1	2.9	2.8
Collagen alpha-1(I) chain	Fibrillar Collagen	Collagen	col1a1	4412.7	2566.0	3107.5	3097.9	2838.1	3161.7
Collagen alpha-1(IV) chain(Arresten/Core Protein)	Basement Membrane	Collagen	col4a1	23.8	17.2	21.9	31.2	40.1	44.9
Collagen alpha-1(VI) chain	Structural ECM	Collagen	col6a1	183.8	122.7	38.2	236.2	304.5	289.4
Collagen alpha-1(VII) chain(Fibronectin type-III 3 Domair	Structural ECM	Collagen	col7a1	10.1	0.2	16.4	7.0	13.9	12.8
Collagen alpha-1(XIV) chain	FACIT Collagen	Collagen	col14a1	25.2	11.0	24.9	41.7	41.1	62.4
Collagen alpha-1/5(IV) chain(Arresten/Core Protein)	Basement Membrane	Collagen	col4a1/5	38.9	14.5	1.8	17.1	24.6	18.5
Collagen alpha-2(I) chain	Fibrillar Collagen	Collagen	col1a2	1852.7	1023.3	1275.0	1954.1	1813.8	1962.7
Collagen alpha-2(IV) chain(Canstatin/Core Protein)	Basement Membrane	Collagen	col4a2	5.5	2.6		32.6	39.7	41.6
Collagen alpha-2(V) chain	Fibrillar Collagen	Collagen	col5a2	11.7	6.5	14.6	17.7	10.8	20.0
Collagen alpha-2(VI) chain	Structural ECM	Collagen	col6a2	213.7	132.7	100.8	321.7	455.3	396.1
Collagen alpha-3(VI) chain	Structural ECM	Collagen	col6a3	212.1	125.1	121.9	204.8	251.9	231.5
Collagen, type VII, alpha 1(Fibronectin type-III 1 Domain)	Structural ECM	Collagen	col7a1	6.0	4.3	2.5	4.5	5.9	6.0
Annexin A2	Other ECM	ECM-affiliated	anxa2	4.3	3.8	2.7	3.1	2.4	3.0
Dermatopontin	Structural ECM	Glycoprotein	dpt	2.9	3.0	1.5	3.1	3.2	3.3
Fibrillin 1	Structural ECM	Glycoprotein	fbn1	53.5	22.2	117.4	31.6	26.4	36.2
Fibulin 5	Matricellular	Glycoprotein	fbln5	1.2	1.3	1.4	0.8	1.0	0.9
Laminin alpha-2	Basement Membrane	Glycoprotein	lama2	2.6	1.2	1.1	3.4	2.6	2.9
Laminin Beta-1	Basement Membrane	Glycoprotein	lamb1	1.4	0.8	0.8	1.8	2.0	1.9
Laminin Beta-2	Basement Membrane	Glycoprotein	lamb2	2.0	1.0	1.0	1.7	1.5	2.0
Myosin(Myosin-3,4,6,7)	Cytoskeletal	Glycoprotein	myh*	69.8	14.0	74.0	136.8	68.8	112.7
Periostin	Matricellular	Glycoprotein	postn	7.7	3.9	5.5	5.9	7.1	8.6
Biglycan	Structural ECM	Proteoglycan	bgn	4.2	4.2	5.1	3.3	3.8	2.7
Lumican	Structural ECM	Proteoglycan	lum	23.7	18.9	1.5	11.7	13.8	13.0
Mimecan/Osteoglycin	Other ECM	Proteoglycan	ogn	10.9	8.8	1.3	12.1	13.7	14.0
Perlecan(Endorepellin)	Basement Membrane	Proteoglycan	hspg2	13.5	6.9	5.2	10.7	13.7	11.7
Prolargin	Structural ECM	Proteoglycan	prelp	2.5	2.2	2.2	2.3	2.1	2.1
	Total Quantified Protein (fmol/mg)			7405.3	4250.0	5061.1	6545.8	6345.1	6862.8

				Quantified protein (fmol/mg)					
Lung				***CNBr***			***NH_2OH***		
Protein	**Functional**	**Matrisome**	**Gene**	*Lung 1*	*Lung 2*	*Lung 3*	*Lung 1*	*Lung 2*	*Lung 3*
Actin (All Isoforms)	Cytoskeletal	Cellular	act	131.2	132.5	135.0	64.3	78.9	67.1
Actin, cytoplasmic 1/2	Cytoskeletal	Cellular	actb	2.1	4.8	6.1	57.5	67.1	59.8
Desmin	Cytoskeletal	Cellular	des	5.2	13.6	15.8	7.8	14.4	12.3
Histone H1(H1.1,H1.2,H1.3,H1.4)	Other Cellular	Cellular	h1	8.4	44.5	76.5	42.0	81.1	35.0
Tubulin beta-4B chain(4b & 5 chain)	Cytoskeletal	Cellular	tubb				16.1	19.7	15.7
Vimentin	Cytoskeletal	Cellular	vim	9.4	22.6	15.8	21.7	24.7	21.9
Collagen alpha-1(I) chain	Fibrillar Collagen	Collagen	col1a1	690.0	528.0	432.0	781.1	862.8	809.0

Collagen alpha-1(I) chain(fragment)	Fibrillar Collagen	Collagen	col1a1	451.3	303.2	281.8	601.3	572.4	513.6
Collagen alpha-1(IV) chain(Arresten/Core Protein)	Basement Membrane	Collagen	col4a1				232.5	192.9	239.0
Collagen alpha-1(VI) chain	Structural ECM	Collagen	col6a1	89.6	78.5	58.0	113.7	92.8	106.5
Collagen alpha-1(XIV) chain	FACIT Collagen	Collagen	col14a1	30.6	44.7	47.8	11.4	14.0	11.7
Collagen alpha-2(I) chain	Fibrillar Collagen	Collagen	col1a2	689.6	470.7	412.9	599.2	534.5	626.0
Collagen alpha-2(IV) chain(Canstatin/Core Protein)	Basement Membrane	Collagen	col4a2	178.0	208.9	165.6	252.5	230.2	211.1
Collagen alpha-2(V) chain	Fibrillar Collagen	Collagen	col5a2	14.9	10.7	11.3	13.4	10.8	10.6
Collagen alpha-2(VI) chain	Structural ECM	Collagen	col6a2	206.0	190.0	99.2	212.6	190.4	216.3
Collagen alpha-3(VI) chain	Structural ECM	Collagen	col6a3	203.3	202.5	142.7	174.8	163.7	177.5
Emilin 1	Structural ECM	Glycoprotein	emilin1	5.3	6.7	4.2	7.3	5.0	5.8
Extracellular Matrix Protein 1	Other ECM	Glycoprotein	ecm1	2.5	7.8		2.0	1.7	2.0
Fibrillin 1	Structural ECM	Glycoprotein	fbn1	3.5	12.9	10.0	80.6	102.3	63.2
Fibronectin 1(type-III 9 domain)	Structural ECM	Glycoprotein	fn1	11.2	16.3	21.2	96.3	96.3	83.8
Fibulin 5	Structural ECM	Glycoprotein	fbln5				78.6	63.1	68.0
Laminin alpha-2	Basement Membrane	Glycoprotein	lama2				3.9	3.5	3.5
Laminin alpha-4	Basement Membrane	Glycoprotein	lama4	5.7	10.2	7.4	12.4	11.6	13.0
Laminin alpha-5	Basement Membrane	Glycoprotein	lama5	19.1	24.4	18.1	16.9	12.3	14.3
Laminin Beta-1	Basement Membrane	Glycoprotein	lamb1	3.5	11.1		11.0	9.2	9.4
Laminin Beta-2	Basement Membrane	Glycoprotein	lamb2	12.2	20.1	11.9	21.4	18.8	17.1
Laminin Gamma-1	Basement Membrane	Glycoprotein	lamc1	5.4	8.6	11.9	157.1	150.3	138.9
Matrilin 1, Cartilage Matrix Protein	Structural ECM	Glycoprotein	matn1				1.1	0.0	0.9
Matrix Gla protein	Other ECM	Glycoprotein	mgp	10.9	32.6	25.5	10.3	17.0	7.2
Myosin(Myosin-3,4,6,7)	Cytoskeletal	Glycoprotein	myh	6.9	8.5	9.5	13.7	7.5	12.5
Nidogen 1/2 (osteonidogen)(Nid1/2)	Basement Membrane	Glycoprotein	nid1/2				16.9	12.3	12.4
Periostin	Matricellular	Glycoprotein	postn	12.6	15.6	12.3	13.8	12.4	12.7
Vitronectin	Structural ECM	Glycoprotein	vtn	4.0	9.1	9.8	3.6	4.2	3.3
Decorin	Structural ECM	Proteoglycan	dcn			3.0	1.1	1.1	1.1
Mimecan/Osteoglycin	Other ECM	Proteoglycan	ogn	22.0	21.4	20.2	17.1	17.2	13.8
Perlecan	Basement Membrane	Proteoglycan	hspg2	34.3	53.3	28.5	106.4	84.6	97.9
Perlecan(Endorepellin)	Basement Membrane	Proteoglycan	hspg2				16.2	14.5	18.4
	Total Quantified Protein (fmol/mg)			2868.7	2514.0	2094.0	3889.6	3795.4	3732.3

				Quantified protein (fmol/mg)					
Muscle				***CNBr***			***NH_2OH***		
Protein	**Functional**	**Matrisome**	**Gene**	*Muscle 1*	*Muscle 2*	*Muscle 3*	*Muscle 1*	*Muscle 2*	*Muscle 3*
Actin (All Isoforms)	Cytoskeletal	Cellular	act	610.5	186.9	488.4	952.2	977.7	644.0
Desmin	Cytoskeletal	Cellular	des	10.3	7.6	8.6	16.2	11.3	10.7
Tubulin beta-4B chain(4b & 5 chain)	Cytoskeletal	Cellular	tubb	3.3			7.8	6.4	8.5
Vimentin	Cytoskeletal	Cellular	vim	2.3	2.5	2.1	5.8	4.1	3.0
Collagen alpha-1(I) chain	Fibrillar Collagen	Collagen	col1a1	528.6	829.8	516.6	979.7	938.4	681.3
Collagen alpha-1(VI) chain	Structural ECM	Collagen	col6a1	88.6	22.8	46.5	62.4	72.9	42.4
Collagen alpha-1(XIV) chain	FACIT Collagen	Collagen	col14a1	8.7	6.9	7.4	8.8	7.2	7.9
Collagen alpha-2(I) chain	Fibrillar Collagen	Collagen	col1a2	239.1	396.2	233.8	598.8	580.1	536.0
Collagen alpha-2(IV) chain	Basement Membrane	Collagen	col4a2	8.5	11.4	10.8	32.3	19.0	17.2
Collagen alpha-2(V) chain	Fibrillar Collagen	Collagen	col5a2	5.3	7.5	4.7	15.5	13.9	11.7
Collagen alpha-2(VI) chain	Structural ECM	Collagen	col6a2	99.4	36.8	49.3	67.5	66.4	48.6
Collagen alpha-3(VI) chain	Structural ECM	Collagen	col6a3	24.0	15.3	23.1	11.8	16.5	12.7
Fibrillin 1	Structural ECM	Glycoprotein	fbn1				9.2	9.9	6.5
Laminin alpha-2	Basement Membrane	Glycoprotein	lama2	4.0		3.5	4.1	5.1	5.4
Laminin Beta-2	Basement Membrane	Glycoprotein	lamb2					2.9	2.1
Laminin Gamma-2	Basement Membrane	Glycoprotein	lamc1		1.3		1.2	0.8	0.5
Myosin(Myosin-3,4,6,7)	Cytoskeletal	Glycoprotein	myh	473.7	511.5	653.2	607.4	659.6	1339.3
Lumican	Structural ECM	Proteoglycan	lum	1.7			2.4	1.8	2.7
Mimecan/Osteoglycin	Other ECM	Proteoglycan	ogn				4.6	4.0	2.3
Perlecan	Basement Membrane	Proteoglycan	hspg2		2.1	12.5	24.1	21.1	8.8
	Total Quantified Protein (fmol/mg)			2108.0	2038.6	2060.6	3411.8	3418.9	3391.6

				Quantified protein (fmol/mg)					
Liver				***CNBr***			***NH_2OH***		
Protein	**Functional**	**Matrisome**	**Gene**	*Liver 1*	*Liver 2*	*Liver 3*	*Liver 1*	*Liver 2*	*Liver 3*
Actin (All Isoforms)	Cytoskeletal	Cellular	act	311.9	888.8	606.9	2370.0	1459.8	825.8
Actin, cytoplasmic 1/2	Cytoskeletal	Cellular	actb	137.0	303.4	274.6	439.4	351.5	610.6
Desmin	Cytoskeletal	Cellular	des	4.6	6.6	6.5	6.5	7.3	7.1
Histone 2A(H2A-A-K)	Other Cellular	Cellular	h2a	17.5	51.4	44.0			
Plectin	Cytoskeletal	Cellular	tubb	15.4	21.6	26.3	55.6	59.9	73.5
Tubulin beta-4B chain(4b & 5 chain)	Cytoskeletal	Cellular	vim	6.4	8.8	8.6	10.6	13.8	19.3
Vimentin	Cytoskeletal	Cellular	myh	18.0	51.7	29.8	605.1	387.9	253.6
Collagen alpha-1(I) chain	Fibrillar Collagen	Collagen	col1a1	478.8	334.8	318.2	395.6	586.4	706.6
Collagen alpha-1(I) chain(C-term Propeptides (NC1 Dom	Fibrillar Collagen	Collagen	col1a1	208.9	141.3	152.0	414.6	648.5	785.7
Collagen alpha-1(IV) chain(Arresten/Core Protein)	Basement Membrane	Collagen	col4a1	25.5	30.9	26.9	87.0	82.2	108.2
Collagen alpha-1(VI) chain	Structural ECM	Collagen	col6a1	72.0	59.8	61.2	148.4	195.6	231.6
Collagen alpha-1(XIV) chain	FACIT Collagen	Collagen	col14a1	4.7	6.4	8.3	90.8	91.8	154.3
Collagen alpha-2(I) chain	Fibrillar Collagen	Collagen	col1a2	235.2	207.5	150.0	805.9	957.9	1179.5
Collagen alpha-2(IV) chain(Canstatin/Core Protein)	Basement Membrane	Collagen	col4a2	17.1	23.7	21.5	83.4	66.8	120.4
Collagen alpha-2(V) chain	Fibrillar Collagen	Collagen	col5a2	2.8	2.7	2.4	10.0	9.9	15.4
Collagen alpha-2(VI) chain	Structural ECM	Collagen	col6a2	87.0	99.7	82.0	180.3	198.3	249.5
Collagen alpha-3(VI) chain	Structural ECM	Collagen	col6a3	55.5	57.1	74.7	203.9	228.5	310.0
Transglutaminase 2	ECM regulator	ECM regulator	tgm2	3.7	6.0	6.9	25.4	23.0	45.2
Galectin-3	Other ECM	ECM-affiliated	lgals3	3.3	0.7	9.4			
Emilin 1	Matricellular	Glycoprotein	emilin1	2.2	2.4	3.3	2.7	2.6	5.0
Fibrillin 1	Structural ECM	Glycoprotein	fbn1	6.7	7.9	9.6	13.3	10.0	8.2
Fibronectin 1(type-III 9 domain)	Structural ECM	Glycoprotein	fn1	13.5	17.3	21.2	145.8	120.5	192.1

Fibulin 1	Matricellular	Glycoprotein	fbln1	0.6	0.1	1.6			
Laminin Beta-2	Basement Membrane	Glycoprotein	hspg2	6.8	11.8	11.1	42.7	38.6	67.6
Myosin(Myosin-3,4,6,7)	Cytoskeletal	Glycoprotein	plec	1.1	1.3	1.9	11.2	6.4	14.3
Biglycan	Structural ECM	Proteoglycan	bgn				4.8	3.0	5.8
Bone Marrow Proteoglycan(BMP & Eosinophil granule m	Other ECM	Proteoglycan	prg2				4.8	3.0	5.8
Lumican	Structural ECM	Proteoglycan	lum	2.1	2.8	3.3	2.5	2.5	3.6
Perlecan(Endorepellin)	Basement Membrane	Proteoglycan	lamb2	1.3	2.5	1.4	2.9	3.0	4.6
	Total Quantified Protein (fmol/mg)			1739.5	2349.1	1963.8	6163.3	5558.5	6003.3

Supplementary Table S3 - Fold change analysis of ECM protein groups from LC-SRM data

		Cellular (fmol/mg)	Collagen (fmol/mg)	Glycoprotein (fmol/mg)	Proteoglycan (fmol/mg)
	Bone 1	136.7	22578.3	153.5	160.2
	Bone 2	90.1	21985.2	148.1	100.3
CNBr	*Bone 3*	110.3	18564.1	126.0	120.8
	Bone 1	532.9	15761.5	428.8	156.0
	Bone 2	550.9	13228.5	182.5	62.6
NH_2OH	*Bone 3*	441.8	16945.3	115.7	73.8
Bone Fold Change NH_2OH/CNBr		***4.5***	***0.7***	***1.7***	***0.8***
	Skin 1	208.6	6996.2	141.2	54.9
	Skin 2	131.6	4026.2	47.4	41.0
CNBr	*Skin 3*	115.0	4725.4	202.6	15.4
	Skin 1	351.0	5966.5	185.1	40.2
	Skin 2	343.4	5839.6	112.7	47.1
NH_2OH	*Skin 3*	400.1	6247.5	168.6	43.6
Skin Fold Change NH_2OH/CNBr		***2.4***	***1.1***	***1.2***	***1.2***
	Lung 1	156.3	2553.2	102.9	56.3
	Lung 2	218.0	2037.4	183.9	74.7
CNBr	*Lung 3*	249.1	1651.3	141.8	51.8
	Lung 1	209.5	2992.6	546.9	140.7
	Lung 2	285.9	2864.4	527.7	117.4
NH_2OH	*Lung 3*	211.8	2921.3	467.9	131.3
Lung Fold Change NH_2OH/CNBr		***1.1***	***1.4***	***3.6***	***2.1***
	Muscle 1	626.4	1002.2	477.7	1.7
	Muscle 2	197.0	1326.6	512.8	2.1
CNBr	*Muscle 3*	499.1	892.2	656.7	12.5
	Muscle 1	982.0	1776.8	621.8	31.1
	Muscle 2	999.4	1714.3	678.3	26.8
NH_2OH	*Muscle 3*	666.3	1357.8	1353.7	13.8
Muscle Fold Change NH_2OH/CNBr		***2.0***	***1.5***	***1.6***	***4.4***
	Liver 1	510.7	1187.6	30.8	3.4
	Liver 2	1332.3	963.8	41.0	5.3
CNBr	*Liver 3*	996.8	897.3	48.8	4.7
	Liver 1	3487.1	2419.9	215.7	10.3
	Liver 2	2280.1	3065.9	178.1	8.5
NH_2OH	*Liver 3*	1789.8	3861.1	287.3	14.0
Liver Fold Change NH_2OH/CNBr		***2.7***	***3.1***	***5.6***	***2.5***
All Tissues Average Fold Change		**2.5**	**1.6**	**2.8**	**2.2**

* Fold Change for each tissue is calculated by dividing the average of three replicates for NH_2OH and dividing by the average of three replicates for CNBr

Supplementary Tables S4 - Data-dependent LC-MS/MS Results

Bone				*Peptide Spectral Matches (PSM)*					
				CNBr			***NH_2OH***		
Identified Proteins	**Gene**	**Accession Number**	**Molecular Weight**	*Femur 1*	*Femur 2*	*Femur 3*	*Femur 1*	*Femur 2*	*Femur 3*
Collagen alpha-2(I) chain	Col1a2	CO1A2_MOUSE	130 kDa	489	473	446	419	333	447
Collagen alpha-1(I) chain	Col1a1	CO1A1_MOUSE	138 kDa	512	465	469	430	446	430
Sarcoplasmic/endoplasmic reticulu	Atp2a1	AT2A1_MOUSE	109 kDa	68	80	77	139	134	125
Collagen alpha-1(III) chain	Col3a1	CO3A1_MOUSE	139 kDa	101	124	81	97	73	114
Myosin-1	Myh1	MYH1_MOUSE	223 kDa	33	60	51	69	71	112
Alpha-actinin-3	Actn3	ACTN3_MOUSE	103 kDa	18	27	24	70	63	82
Collagen alpha-1(XII) chain	Col12a1	COCA1_MOUSE	340 kDa	96	61	69	75	21	74
Collagen alpha-1(II) chain	Col2a1	CO2A1_MOUSE	142 kDa	106	145	132	214	69	69
Alpha-actinin-2	Actn2	ACTN2_MOUSE	104 kDa	6	17	9	37	34	43
Filamin-C	Flnc	FLNC_MOUSE	291 kDa	3	6	4	30	12	37
Actin, alpha skeletal muscle	Acta1	ACTS_MOUSE	42 kDa	18	14	19	38	39	36
ADP/ATP translocase 1	Slc25a4	ADT1_MOUSE	33 kDa	9	17	13	36	23	32
Collagen alpha-1(VI) chain	Col6a1	CO6A1_MOUSE	108 kDa	50	43	51	28	11	27
Collagen alpha-2(V) chain	Col5a2	CO5A2_MOUSE	145 kDa	27	32	26	30	20	26
Myosin-7	Myh7	MYH7_MOUSE	223 kDa	7	14	7	26	15	23
Alpha-2-HS-glycoprotein	Ahsg	FETUA_MOUSE	37 kDa	44	64	48	24	13	22
Plectin	Plec	PLEC_MOUSE	534 kDa	0	3	1	21	3	21
Collagen alpha-2(XI) chain	Col11a2	COBA2_MOUSE	172 kDa	19	22	21	32	8	16
Cytochrome c oxidase subunit 2	Mtco2	COX2_MOUSE	26 kDa	0	0	0	11	6	15
Fibronectin	Fn1	FINC_MOUSE	273 kDa	12	16	8	27	1	15
Collagen alpha-2(VI) chain	Col6a2	CO6A2_MOUSE	110 kDa	19	21	22	14	5	15
Keratin, type I cytoskeletal 10	Krt10	K1C10_MOUSE	58 kDa	2	2	2	3	0	13
Tubulin alpha-1C chain	Tuba1c	TBA1C_MOUSE	50 kDa	4	6	1	9	4	11
AMP deaminase 1	Ampd1	AMPD1_MOUSE	86 kDa	1	2	0	6	2	10
Collagen alpha-1(IX) chain	Col9a1	CO9A1_MOUSE	92 kDa	17	19	19	36	4	10
Periostin	Postn	POSTN_MOUSE	93 kDa	50	30	27	4	0	10
Biglycan	Bgn	PGS1_MOUSE	42 kDa	42	49	45	22	0	10
Cartilage intermediate layer protein	Cilp2	CILP2_MOUSE	126 kDa	17	12	19	9	4	9
Tubulin beta-5 chain	Tubb5	TBB5_MOUSE	50 kDa	0	2	0	9	3	8
Vimentin	Vim	VIME_MOUSE	54 kDa	9	11	4	9	0	8
Collagen alpha-1(XI) chain	Col11a1	COBA1_MOUSE	181 kDa	12	14	15	13	8	8
Voltage-dependent anion-selective	Vdac1	VDAC1_MOUSE	32 kDa	2	1	2	7	2	7
Myosin light chain 1/3, skeletal mu	Myl1	MYL1_MOUSE	21 kDa	12	7	19	8	11	7
Myosin-8	Myh8	MYH8_MOUSE	223 kDa	0	4	0	1	3	6
Desmin	Des	DESM_MOUSE	53 kDa	2	2	4	3	0	6
Reticulon-2	Rtn2	RTN2_MOUSE	51 kDa	3	2	2	6	2	6
Myomesin-1	Myom1	MYOM1_MOUSE	185 kDa	2	2	4	7	1	6
ATP synthase subunit alpha, mitod	Atp5a1	ATPA_MOUSE	60 kDa	2	2	4	7	2	6
Prothrombin	F2	THRB_MOUSE	70 kDa	11	17	16	5	1	6
Titin	Ttn	TITIN_MOUSE	3906 kDa	124	275	163	1164	827	1228
Myosin-4	Myh4	MYH4_MOUSE	223 kDa	252	292	284	477	542	493
Laminin subunit alpha-2	Lama2	LAMA2_MOUSE	344 kDa	0	0	0	4	0	5
Fibrillin-1	Fbn1	FBN1_MOUSE	312 kDa	0	0	2	4	0	5
Vitronectin	Vtn	VTNC_MOUSE	55 kDa	2	4	1	4	1	5
Keratin, type II cytoskeletal 6A	Krt6a	K2C6A_MOUSE	59 kDa	4	4	4	4	4	5
Basement membrane-specific hep	Hspg2	PGBM_MOUSE	398 kDa	5	10	5	13	2	5
Collagen alpha-1(IV) chain	Col4a1	CO4A1_MOUSE	161 kDa	0	0	0	2	1	4
Collagen alpha-2(IV) chain	Col4a2	CO4A2_MOUSE	167 kDa	0	1	1	1	0	4
Sarcoplasmic/endoplasmic reticulu	Atp2a2	AT2A2_MOUSE	115 kDa	0	0	0	2	2	4
Obscurin	Obscn	OBSCN_MOUSE	966 kDa	0	0	0	6	1	4
Serpin H1	Serpinh1	SERPH_MOUSE	47 kDa	0	2	0	10	0	4
Thrombospondin-1	Thbs1	TSP1_MOUSE	130 kDa	18	13	17	10	1	4
Dolichyl-diphosphooligosaccharide	Rpn1	RPN1_MOUSE	69 kDa	0	0	1	2	0	3
ATP synthase subunit f, mitochond	Atp5j2	ATPK_MOUSE	10 kDa	0	0	0	3	0	3
Actin, cytoplasmic 1	Actb	ACTB_MOUSE	42 kDa	0	0	0	4	0	3
NADH dehydrogenase [ubiquinone	Ndufa9	NDUA9_MOUSE	43 kDa	0	0	0	5	1	3
Calcium-binding mitochondrial carr	Slc25a12	CMC1_MOUSE	75 kDa	0	1	0	4	1	3
Myosin regulatory light chain 2, ske	Mylpf	MLRS_MOUSE	19 kDa	4	4	7	2	2	3
Collagen alpha-2(IX) chain	Col9a2	CO9A2_MOUSE	65 kDa	8	10	9	21	2	3
Chondroadherin	Chad	CHAD_MOUSE	40 kDa	11	17	17	17	1	3
Laminin subunit gamma-1	Lamc1	LAMC1_MOUSE	177 kDa	0	0	0	4	0	2
L-lactate dehydrogenase A chain	Ldha	LDHA_MOUSE	36 kDa	0	0	0	3	2	2
Alpha-actinin-1	Actn1	ACTN1_MOUSE	103 kDa	0	0	0	7	0	2

Ubiquitin-60S ribosomal protein L4	Uba52	RL40_MOUSE	15 kDa	0	2	2	3	0	2
Ryanodine receptor 1	Ryr1	RYR1_MOUSE	565 kDa	0	0	0	6	2	2
Osteopontin	Spp1	OSTP_MOUSE	32 kDa	2	0	3	4	0	2
Myozenin-1	Myoz1	MYOZ1_MOUSE	31 kDa	3	1	5	2	1	2
Histone H4	Hist1h4a	H4_MOUSE	11 kDa	2	1	2	8	0	2
Hemoglobin subunit beta-1	Hbb-b1	HBB1_MOUSE	16 kDa	2	2	1	7	2	2
Histone H2B type 1-B	Hist1h2bb	H2B1B_MOUSE	14 kDa	4	3	3	5	0	2
Collagen alpha-1(X) chain	Col10a1	COAA1_MOUSE	67 kDa	3	6	4	16	0	2
Fibromodulin	Fmod	FMOD_MOUSE	43 kDa	14	14	12	13	2	2
Clathrin heavy chain 1	Cltc	CLH1_MOUSE	192 kDa	0	1	0	3	0	1
Myosin-9	Myh9	MYH9_MOUSE	226 kDa	1	3	0	2	0	1
Prolargin	Prelp	PRELP_MOUSE	43 kDa	1	3	0	3	0	1
Aggrecan core protein	Acan	PGCA_MOUSE	222 kDa	3	3	2	14	0	1
Nidogen-2	Nid2	NID2_MOUSE	154 kDa	0	0	0	2	0	0
Vitamin K-dependent protein S	Pros1	PROS_MOUSE	75 kDa	0	2	0	0	0	0
Keratin, type II cuticular Hb4	Krt84	KRT84_MOUSE	65 kDa	0	3	0	0	0	0
Olfactomedin-like protein 3	Olfml3	OLFL3_MOUSE	46 kDa	1	0	3	0	0	0
ATP synthase subunit a	Mtatp6	ATP6_MOUSE	25 kDa	0	3	1	0	0	0
Decorin	Dcn	PGS2_MOUSE	40 kDa	1	3	0	1	0	0
Myosin-11	Myh11	MYH11_MOUSE	227 kDa	0	5	0	0	0	0
Hemoglobin subunit alpha	Hba	HBA_MOUSE	15 kDa	0	1	0	4	0	0
Collagen alpha-1(V) chain	Col5a1	CO5A1_MOUSE	184 kDa	2	1	0	1	2	0
Eosinophil peroxidase	Epx	PERE_MOUSE	81 kDa	0	3	0	3	0	0
Keratin, type II cytoskeletal 1b	Krt77	K2C1B_MOUSE	61 kDa	0	4	0	2	0	0
Sushi-repeat-containing protein SR	Srpx	SRPX_MOUSE	52 kDa	0	4	0	2	0	0
Alpha-1-antitrypsin 1-4	Serpina1d	A1AT4_MOUSE	46 kDa	1	2	4	0	0	0
Pyruvate kinase PKM	Pkm	KPYM_MOUSE	58 kDa	0	0	0	7	0	0
Elongation factor 1-alpha 1	Eef1a1	EF1A1_MOUSE	50 kDa	0	1	0	6	0	0
Myelin protein P0	Mpz	MYP0_MOUSE	28 kDa	4	1	1	2	0	0
Osteomodulin	Omd	OMD_MOUSE	50 kDa	2	4	2	0	0	0
Hyaluronan and proteoglycan link	Hapln1	HPLN1_MOUSE	40 kDa	0	2	0	7	0	0
Apolipoprotein A-I	Apoa1	APOA1_MOUSE	31 kDa	3	1	6	0	0	0
Histone H2A type 2-A	Hist2h2aa1	H2A2A_MOUSE	14 kDa	0	3	2	5	0	0
Lumican	Lum	LUM_MOUSE	38 kDa	7	2	2	0	0	0
Lactadherin	Mfge8	MFGM_MOUSE	51 kDa	1	9	6	2	0	0
Matrilin-3	Matn3	MATN3_MOUSE	52 kDa	4	5	1	10	0	0
Pigment epithelium-derived factor	Serpinf1	PEDF_MOUSE	46 kDa	8	12	9	1	0	0
Cartilage oligomeric matrix protein	Comp	COMP_MOUSE	82 kDa	5	10	8	12	0	0
Cartilage matrix protein	Matn1	MATN1_MOUSE	54 kDa	6	17	4	27	0	0
SPARC	Sparc	SPRC_MOUSE	34 kDa	13	26	16	13	0	0
Serum albumin	Alb	ALBU_MOUSE	69 kDa	19	20	27	8	0	0

Skin				**CNBr**			**NH_2OH**		
Identified Proteins	**Gene**	**Accession Number**	**Molecular Weight**	*Skin 1*	*Skin 2*	*Skin 3*	*Skin 1*	*Skin 2*	*Skin 3*
Collagen alpha-1(I) chain	Col1a1	CO1A1_MOUSE	138 kDa	384	394	294	461	455	316
Collagen alpha-1(III) chain	Col3a1	CO3A1_MOUSE	139 kDa	311	298	214	335	335	231
Collagen alpha-2(I) chain	Col1a2	CO1A2_MOUSE	130 kDa	293	294	196	353	349	216
Myosin-4	Myh4	MYH4_MOUSE	223 kDa	133	54	93	242	181	90
Myosin-1	Myh1	MYH1_MOUSE	223 kDa	30	7	16	72	47	33
Keratin, type II cytoskeletal 1b	Krt77	K2C1B_MOUSE	61 kDa	49	65	12	53	81	31
Keratin, type I cuticular Ha3-II	Krt33b	KT33B_MOUSE	46 kDa	1	3	0	22	15	30
Actin, alpha skeletal muscle	Acta1	ACTS_MOUSE	42 kDa	19	16	5	62	54	30
Collagen alpha-1(VI) chain	Col6a1	CO6A1_MOUSE	108 kDa	50	61	4	38	45	27
Sarcoplasmic/endoplasmic reticulu	Atp2a1	AT2A1_MOUSE	109 kDa	57	16	30	73	44	27
Keratin, type I cuticular Ha4	Krt34	KRT34_MOUSE	45 kDa	2	6	0	13	13	19
Keratin, type II cuticular Hb4	Krt84	KRT84_MOUSE	65 kDa	39	51	4	32	41	19
Alpha-actinin-3	Actn3	ACTN3_MOUSE	103 kDa	11	0	3	43	25	14
Keratin, type I cytoskeletal 10	Krt10	K1C10_MOUSE	58 kDa	45	68	18	29	41	14
Fibrillin-1	Fbn1	FBN1_MOUSE	312 kDa	38	36	5	36	33	13
Histone H4	Hist1h4a	H4_MOUSE	11 kDa	5	10	1	16	18	12
Collagen alpha-2(VI) chain	Col6a2	CO6A2_MOUSE	110 kDa	18	24	3	34	46	11
Tubulin beta-5 chain	Tubb5	TBB5_MOUSE	50 kDa	2	3	0	20	21	10
Keratin, type I cytoskeletal 15	Krt15	K1C15_MOUSE	49 kDa	9	16	2	14	19	10
Alpha-actinin-2	Actn2	ACTN2_MOUSE	104 kDa	11	0	1	32	23	10
ADP/ATP translocase 1	Slc25a4	ADT1_MOUSE	33 kDa	16	13	2	27	21	10
Keratin, type I cytoskeletal 14	Krt14	K1C14_MOUSE	53 kDa	18	33	5	36	34	10
Keratin-associated protein 3-2	Krtap3-2	KRA32_MOUSE	11 kDa	0	1	0	5	3	9

Myelin protein P0	Mpz	MYP0_MOUSE	28 kDa	11	6	1	17	13	9
Desmoplakin	Dsp	DESP_MOUSE	333 kDa	15	43	0	30	73	8
Keratin-associated protein 7-1	Krtap7-1	KRA71_MOUSE	10 kDa	0	0	0	5	5	7
Histone H2B type 1-B	Hist1h2bb	H2B1B_MOUSE	14 kDa	13	12	3	8	12	7
Keratin, type I cytoskeletal 17	Krt17	K1C17_MOUSE	48 kDa	15	16	1	14	20	7
Tubulin alpha-1C chain	Tuba1c	TBA1C_MOUSE	50 kDa	9	17	3	22	30	7
Dual specificity protein phosphatas	Dusp14	DUS14_MOUSE	22 kDa	0	0	0	1	1	6
Filaggrin-2	Flg2	FILA2_MOUSE	251 kDa	15	23	3	9	12	6
Vimentin	Vim	VIME_MOUSE	54 kDa	11	21	5	17	18	6
Keratin, type I cytoskeletal 16	Krt16	K1C16_MOUSE	52 kDa	14	22	4	14	21	6
Keratin, type II cytoskeletal 6A	Krt6a	K2C6A_MOUSE	59 kDa	16	21	2	16	21	6
Keratin, type I cuticular Ha5	Krt35	KRT35_MOUSE	51 kDa	0	6	0	1	2	5
Keratin, type II cytoskeletal 79	Krt79	K2C79_MOUSE	58 kDa	6	9	2	15	20	5
Asporin	Aspn	ASPN_MOUSE	43 kDa	7	17	0	16	21	5
Titin	Ttn	TITIN_MOUSE	3906 kDa	28	0	2	337	102	5
Keratin-associated protein 15-1	Krtap15-1	KR151_MOUSE	16 kDa	0	0	0	3	2	4
Keratin-associated protein 6-5	Krtap6-5	KRA65_MOUSE	8 kDa	0	0	0	4	4	4
Junction plakoglobin	Jup	PLAK_MOUSE	82 kDa	8	12	0	12	24	4
Elastin	Eln	ELN_MOUSE	72 kDa	4	8	0	7	3	3
Histone H2A type 1-F	Hist1h2af	H2A1F_MOUSE	14 kDa	3	5	0	6	9	3
Galectin-7	Lgals7	LEG7_MOUSE	15 kDa	3	10	2	6	7	3
Actin, cytoplasmic 1	Actb	ACTB_MOUSE	42 kDa	2	3	0	11	14	3
Epiplakin	Eppk1	EPIPL_MOUSE	725 kDa	4	6	0	9	17	3
Myosin-8	Myh8	MYH8_MOUSE	223 kDa	0	0	0	0	0	2
Microfibril-associated glycoprotein	Mfap4	MFAP4_MOUSE	29 kDa	0	0	0	2	2	2
Protein FAM26D	Fam26d	FA26D_MOUSE	35 kDa	0	0	0	2	3	2
Keratin, type II cuticular Hb2	Krt82	KRT82_MOUSE	57 kDa	0	3	0	2	4	2
Fibulin-5	Fbln5	FBLN5_MOUSE	50 kDa	0	1	0	4	7	2
Basement membrane-specific hep	Hspg2	PGBM_MOUSE	398 kDa	1	1	0	2	9	2
Keratin, type I cytoskeletal 13	Krt13	K1C13_MOUSE	48 kDa	0	2	0	7	7	2
Keratin, type II cytoskeletal 8	Krt8	K2C8_MOUSE	55 kDa	4	7	0	5	5	2
Laminin subunit gamma-1	Lamc1	LAMC1_MOUSE	177 kDa	3	7	0	6	5	2
Ubiquitin-60S ribosomal protein L4	Uba52	RL40_MOUSE	15 kDa	3	7	0	4	8	2
Decorin	Dcn	PGS2_MOUSE	40 kDa	13	19	0	6	8	2
Keratin, type I cuticular Ha2	Krt32	K1H2_MOUSE	46 kDa	0	0	0	1	2	1
Cytochrome c oxidase subunit 2	Mtco2	COX2_MOUSE	26 kDa	0	0	0	6	6	1
Desmoglein-1-alpha	Dsg1a	DSG1A_MOUSE	115 kDa	0	4	0	2	7	1
ADP/ATP translocase 2	Slc25a5	ADT2_MOUSE	33 kDa	2	4	1	3	4	1
Collagen alpha-1(II) chain	Col2a1	CO2A1_MOUSE	142 kDa	3	4	3	4	3	1
Histidine ammonia-lyase	Hal	HUTH_MOUSE	72 kDa	2	7	0	0	9	1
Collagen alpha-1(IV) chain	Col4a1	CO4A1_MOUSE	161 kDa	2	2	0	7	8	1
Collagen alpha-1(XIV) chain	Col14a1	COEA1_MOUSE	193 kDa	2	3	0	6	10	1
14-3-3 protein sigma	Sfn	1433S_MOUSE	28 kDa	2	6	0	8	8	1
Clathrin heavy chain 1	Cltc	CLH1_MOUSE	192 kDa	9	15	0	4	6	1
Lumican	Lum	LUM_MOUSE	38 kDa	15	16	2	6	8	1
Keratin, type II cytoskeletal 1	Krt1	K2C1_MOUSE	66 kDa	9	16	3	14	15	1
Periaxin	Prx	PRAX_MOUSE	148 kDa	1	0	0	0	0	0
Myosin-7	Myh7	MYH7_MOUSE	223 kDa	0	0	0	1	0	0
Collagen alpha-4(IV) chain	Col4a4	CO4A4_MOUSE	164 kDa	0	1	0	0	0	0
Fatty acid synthase	Fasn	FAS_MOUSE	272 kDa	0	1	0	0	0	0
Tricarboxylate transport protein, m	Slc25a1	TXTP_MOUSE	34 kDa	0	0	0	0	1	0
Mitochondrial amidoxime reducing	2-Mar	MARC2_MOUSE	38 kDa	0	1	0	0	0	0
Prohibitin-2	Phb2	PHB2_MOUSE	33 kDa	0	0	0	0	1	0
Prohibitin	Phb	PHB_MOUSE	30 kDa	0	0	0	0	1	0
Heat shock cognate 71 kDa protei	Hspa8	HSP7C_MOUSE	71 kDa	0	0	0	0	1	0
Keratin, type II cytoskeletal 2 epide	Krt2	K22E_MOUSE	71 kDa	0	0	0	1	0	0
Corticosteroid 11-beta-dehydroger	Hsd11b1	DHI1_MOUSE	32 kDa	0	1	0	0	0	0
Cytochrome b5 type B	Cyb5b	CYB5B_MOUSE	16 kDa	0	0	0	1	0	0
Lamin-B1	Lmnb1	LMNB1_MOUSE	67 kDa	0	0	0	0	1	0
Dolichyl-diphosphooligosaccharide	Dad1	DAD1_MOUSE	12 kDa	0	1	0	0	0	0
NADH dehydrogenase [ubiquinone	Ndufa13	NDUAD_MOUSE	17 kDa	0	0	0	1	0	0
Solute carrier family 22 member 27	Slc22a27	S22AR_MOUSE	62 kDa	0	0	0	0	1	0
Annexin A7	Anxa7	ANXA7_MOUSE	50 kDa	0	0	0	0	1	0
Nidogen-2	Nid2	NID2_MOUSE	154 kDa	0	0	0	0	1	0
Keratin, type I cytoskeletal 19	Krt19	K1C19_MOUSE	45 kDa	0	1	0	0	0	0
Fibrinogen beta chain	Fgb	FIBB_MOUSE	55 kDa	1	0	0	1	0	0
Platelet glycoprotein 4	Cd36	CD36_MOUSE	53 kDa	1	1	0	0	0	0
Desmin	Des	DESM_MOUSE	53 kDa	0	0	0	2	0	0

Dihydrolipoyllysine-residue acetylt	Dlat	ODP2_MOUSE	68 kDa	0	0	0	1	1	0
Alpha-actinin-1	Actn1	ACTN1_MOUSE	103 kDa	0	0	0	1	1	0
Acyl-CoA dehydrogenase family m	Acad9	ACAD9_MOUSE	69 kDa	0	2	0	0	0	0
Heterogeneous nuclear ribonucleo	Hnrnpk	HNRPK_MOUSE	51 kDa	0	0	0	1	1	0
40S ribosomal protein S3	Rps3	RS3_MOUSE	27 kDa	0	0	0	0	2	0
Unconventional myosin-Ic	Myo1c	MYO1C_MOUSE	122 kDa	0	0	0	0	2	0
Dolichyl-diphosphooligosaccharide	Ddost	OST48_MOUSE	49 kDa	0	0	0	0	3	0
NADH dehydrogenase [ubiquinone	Ndufa9	NDUA9_MOUSE	43 kDa	0	0	0	1	2	0
Heat shock protein HSP 90-beta	Hsp90ab1	HS90B_MOUSE	83 kDa	0	2	0	0	1	0
Membrane-associated progesteron	Pgrmc1	PGRC1_MOUSE	22 kDa	0	0	0	0	3	0
Caveolin-1	Cav1	CAV1_MOUSE	21 kDa	0	0	0	1	2	0
Microsomal glutathione S-transfera	Mgst1	MGST1_MOUSE	18 kDa	2	2	0	0	0	0
Surfeit locus protein 4	Surf4	SURF4_MOUSE	30 kDa	2	2	0	0	0	0
Collagen alpha-6(VI) chain	Col6a6	CO6A6_MOUSE	246 kDa	1	0	0	1	2	0
Fibrinogen alpha chain	Fga	FIBA_MOUSE	87 kDa	0	0	0	1	3	0
Cytochrome b-c1 complex subunit	Uqcrc1	QCR1_MOUSE	53 kDa	0	0	0	3	1	0
Cytochrome c1, heme protein, mit	Cyc1	CY1_MOUSE	35 kDa	0	0	0	2	2	0
Nidogen-1	Nid1	NID1_MOUSE	137 kDa	0	0	0	1	3	0
Voltage-dependent anion-selective	Vdac3	VDAC3_MOUSE	31 kDa	0	0	0	2	2	0
NADH-ubiquinone oxidoreductase	Ndufs1	NDUS1_MOUSE	80 kDa	0	0	0	1	3	0
Laminin subunit alpha-4	Lama4	LAMA4_MOUSE	202 kDa	0	0	0	2	2	0
Protein-glutamine gamma-glutamy	Tgm1	TGM1_MOUSE	90 kDa	0	2	0	0	2	0
Insulin-degrading enzyme	Ide	IDE_MOUSE	118 kDa	0	1	0	0	3	0
Aminopeptidase N	Anpep	AMPN_MOUSE	110 kDa	0	1	0	1	2	0
Desmoglein-3	Dsg3	DSG3_MOUSE	108 kDa	0	4	0	0	0	0
Sodium/potassium-transporting AT	Atp1a1	AT1A1_MOUSE	113 kDa	2	3	0	0	0	0
ATP synthase subunit a	Mtatp6	ATP6_MOUSE	25 kDa	2	3	0	0	0	0
Lymphocyte antigen 6D	Ly6d	LY6D_MOUSE	13 kDa	1	4	0	0	0	0
Tubulin beta-4B chain	Tubb4b	TBB4B_MOUSE	50 kDa	0	0	0	3	2	0
Prelamin-A/C	Lmna	LMNA_MOUSE	74 kDa	0	2	0	1	2	0
Plakophilin-1	Pkp1	PKP1_MOUSE	81 kDa	0	3	0	0	2	0
Prolargin	Prelp	PRELP_MOUSE	43 kDa	0	0	0	2	3	0
Annexin A2	Anxa2	ANXA2_MOUSE	39 kDa	0	2	0	1	2	0
Laminin subunit beta-1	Lamb1	LAMB1_MOUSE	197 kDa	2	1	0	0	3	0
Leucine-rich repeat-containing pro	Lrrc15	LRC15_MOUSE	64 kDa	2	3	0	0	1	0
ATP synthase subunit alpha, mitoc	Atp5a1	ATPA_MOUSE	60 kDa	0	2	0	2	2	0
ATP synthase subunit beta, mitoch	Atp5b	ATPB_MOUSE	56 kDa	0	0	0	3	3	0
Collagen alpha-1(XVI) chain	Col16a1	COGA1_MOUSE	156 kDa	0	0	0	3	3	0
40S ribosomal protein S2	Rps2	RS2_MOUSE	31 kDa	0	0	0	2	4	0
Calnexin	Canx	CALX_MOUSE	67 kDa	0	3	0	0	3	0
Tubulin beta-3 chain	Tubb3	TBB3_MOUSE	50 kDa	0	0	0	1	5	0
Heat shock protein beta-1	Hspb1	HSPB1_MOUSE	23 kDa	0	1	0	2	3	0
Peptidyl-prolyl cis-trans isomerase	Ppia	PPIA_MOUSE	18 kDa	0	3	0	0	3	0
Myosin-14	Myh14	MYH14_MOUSE	229 kDa	2	3	0	1	1	0
Transmembrane protein 43	Tmem43	TMM43_MOUSE	45 kDa	1	2	0	2	2	0
Myomesin-1	Myom1	MYOM1_MOUSE	185 kDa	0	0	0	7	0	0
Protein S100-A3	S100a3	S10A3_MOUSE	12 kDa	0	0	0	2	5	0
Sarcoplasmic/endoplasmic reticulu	Atp2a2	AT2A2_MOUSE	115 kDa	4	2	0	0	2	0
Integrin beta-4	Itgb4	ITB4_MOUSE	202 kDa	2	2	0	1	3	0
Desmocollin-3	Dsc3	DSC3_MOUSE	100 kDa	2	2	0	2	2	0
Protein-glutamine gamma-glutamy	Tgm2	TGM2_MOUSE	77 kDa	0	0	0	4	4	0
Laminin subunit beta-2	Lamb2	LAMB2_MOUSE	197 kDa	0	0	0	3	5	0
Histone H3.1	Hist1h3a	H31_MOUSE	15 kDa	0	2	0	2	4	0
Elongation factor 1-alpha 1	Eef1a1	EF1A1_MOUSE	50 kDa	0	0	0	4	4	0
Laminin subunit alpha-2	Lama2	LAMA2_MOUSE	344 kDa	0	0	0	3	6	0
Mitochondrial 2-oxoglutarate/malat	Slc25a11	M2OM_MOUSE	34 kDa	2	2	0	3	3	0
Phosphate carrier protein, mitocho	Slc25a3	MPCP_MOUSE	40 kDa	3	4	0	2	2	0
Dipeptidase 1	Dpep1	DPEP1_MOUSE	46 kDa	3	1	0	3	4	0
Fibrinogen gamma chain	Fgg	FIBG_MOUSE	49 kDa	2	2	2	2	3	0
Myosin-11	Myh11	MYH11_MOUSE	227 kDa	2	5	0	0	5	0
Keratin, type II cytoskeletal 80	Krt80	K2C80_MOUSE	51 kDa	0	0	0	2	10	0
Very-long-chain enoyl-CoA reducta	Tecr	TECR_MOUSE	36 kDa	4	4	0	2	3	0
Thy-1 membrane glycoprotein	Thy1	THY1_MOUSE	18 kDa	3	6	0	2	2	0
Mimecan	Ogn	MIME_MOUSE	34 kDa	5	6	0	2	1	0
Transforming growth factor-beta-in	Tgfbi	BGH3_MOUSE	75 kDa	0	0	0	7	8	0
Sushi-repeat-containing protein SR	Srpx	SRPX_MOUSE	52 kDa	0	5	0	4	6	0
Myosin light chain 1/3, skeletal mu	Myl1	MYL1_MOUSE	21 kDa	2	0	8	5	1	0
Serpin H1	Serpinh1	SERPH_MOUSE	47 kDa	1	2	0	5	8	0

Voltage-dependent anion-selective	Vdac1	VDAC1_MOUSE	32 kDa	3	3	0	8	3	0
Dolichyl-diphosphooligosaccharide	Rpn1	RPN1_MOUSE	69 kDa	3	8	0	3	6	0
Collagen alpha-1(V) chain	Col5a1	CO5A1_MOUSE	184 kDa	2	6	2	5	5	0
Dolichyl-diphosphooligosaccharide	Rpn2	RPN2_MOUSE	69 kDa	7	8	2	2	2	0
Keratin, type I cuticular Ha6	Krt36	KRT36_MOUSE	53 kDa	3	6	0	4	8	0
Biglycan	Bgn	PGS1_MOUSE	42 kDa	5	8	3	2	4	0
Periostin	Postn	POSTN_MOUSE	93 kDa	3	8	0	3	8	0
Filamin-C	Flnc	FLNC_MOUSE	291 kDa	2	2	2	13	8	0
Collagen alpha-2(IV) chain	Col4a2	CO4A2_MOUSE	167 kDa	2	3	0	13	10	0
Serum albumin	Alb	ALBU_MOUSE	69 kDa	7	26	0	0	0	0
Plectin	Plec	PLEC_MOUSE	534 kDa	1	4	0	12	22	0
Keratin, type II cytoskeletal 75	Krt75	K2C75_MOUSE	60 kDa	9	13	0	6	12	0
Collagen alpha-2(V) chain	Col5a2	CO5A2_MOUSE	145 kDa	6	6	4	12	12	0
Myosin-9	Myh9	MYH9_MOUSE	226 kDa	7	19	0	5	18	0
Collagen alpha-1(VII) chain	Col7a1	CO7A1_MOUSE	295 kDa	12	17	1	14	30	0

Lung				**CNBr**			**NH_2OH**		
Identified Proteins	**Gene**	**Accession Number**	**Molecular Weight**	*Lung 1*	*Lung 2*	*Lung 3*	*Lung 1*	*Lung 2*	*Lung 3*
Collagen alpha-1(I) chain	Col1a1	CO1A1_MOUSE	138 kDa	119	312	115	314	224	278
Collagen alpha-1(III) chain	Col3a1	CO3A1_MOUSE	139 kDa	72	241	66	215	167	191
Collagen alpha-2(I) chain	Col1a2	CO1A2_MOUSE	130 kDa	86	205	75	196	137	181
Basement membrane-specific hep	Hspg2	PGBM_MOUSE	398 kDa	0	32	5	102	53	85
Myosin-14	Myh14	MYH14_MOUSE	229 kDa	0	8	5	121	46	82
Collagen alpha-2(IV) chain	Col4a2	CO4A2_MOUSE	167 kDa	3	27	8	104	54	69
Plectin	Plec	PLEC_MOUSE	534 kDa	0	1	0	106	38	59
Laminin subunit beta-2	Lamb2	LAMB2_MOUSE	197 kDa	0	20	2	67	36	47
Collagen alpha-1(VI) chain	Col6a1	CO6A1_MOUSE	108 kDa	1	14	1	40	18	43
Vimentin	Vim	VIME_MOUSE	54 kDa	10	18	12	36	27	41
Laminin subunit alpha-3	Lama3	LAMA3_MOUSE	366 kDa	0	11	1	39	18	37
Laminin subunit alpha-5	Lama5	LAMA5_MOUSE	404 kDa	0	15	0	63	31	37
Fibrillin-1	Fbn1	FBN1_MOUSE	312 kDa	0	13	0	42	28	36
Laminin subunit gamma-1	Lamc1	LAMC1_MOUSE	177 kDa	5	33	10	57	29	34
Talin-1	Tln1	TLN1_MOUSE	270 kDa	0	7	0	50	24	33
Collagen alpha-1(IV) chain	Col4a1	CO4A1_MOUSE	161 kDa	5	12	2	41	32	32
Myosin-11	Myh11	MYH11_MOUSE	227 kDa	0	0	0	14	11	31
Keratin, type II cuticular Hb2	Krt82	KRT82_MOUSE	57 kDa	0	0	0	0	76	28
Tubulin alpha-1C chain	Tuba1c	TBA1C_MOUSE	50 kDa	0	4	0	27	22	27
Vinculin	Vcl	VINC_MOUSE	117 kDa	0	2	0	40	22	25
Nidogen-1	Nid1	NID1_MOUSE	137 kDa	0	2	0	23	19	22
Laminin subunit beta-1	Lamb1	LAMB1_MOUSE	197 kDa	1	8	3	24	12	22
Collagen alpha-2(VI) chain	Col6a2	CO6A2_MOUSE	110 kDa	0	12	1	29	15	20
Actin, alpha skeletal muscle	Acta1	ACTS_MOUSE	42 kDa	2	1	2	19	16	19
EMILIN-1	Emilin1	EMIL1_MOUSE	108 kDa	1	11	3	20	10	19
Fibronectin	Fn1	FINC_MOUSE	273 kDa	0	2	0	34	15	19
ADP/ATP translocase 1	Slc25a4	ADT1_MOUSE	33 kDa	0	2	0	10	11	18
Myosin-9	Myh9	MYH9_MOUSE	226 kDa	0	3	0	41	14	17
Fibrinogen gamma chain	Fgg	FIBG_MOUSE	49 kDa	0	4	1	21	8	16
Tubulin beta-5 chain	Tubb5	TBB5_MOUSE	50 kDa	0	0	0	29	20	16
Fibulin-5	Fbln5	FBLN5_MOUSE	50 kDa	0	2	0	13	14	15
Band 3 anion transport protein	Slc4a1	B3AT_MOUSE	103 kDa	0	6	4	18	5	15
Protein-glutamine gamma-glutamy	Tgm2	TGM2_MOUSE	77 kDa	0	4	0	20	10	15
Titin	Ttn	TITIN_MOUSE	3906 kDa	0	0	0	12	2	14
Fibrinogen alpha chain	Fga	FIBA_MOUSE	87 kDa	0	5	2	16	4	14
Collagen alpha-4(IV) chain	Col4a4	CO4A4_MOUSE	164 kDa	0	6	2	15	8	14
Histone H4	Hist1h4a	H4_MOUSE	11 kDa	0	4	0	11	22	14
Laminin subunit beta-3	Lamb3	LAMB3_MOUSE	129 kDa	0	6	2	16	7	13
Desmin	Des	DESM_MOUSE	53 kDa	4	7	1	4	9	12
Keratin, type I cuticular Ha3-I	Krt33a	KT33A_MOUSE	46 kDa	0	0	0	0	168	12
Nephronectin	Npnt	NPNT_MOUSE	61 kDa	0	4	1	16	10	11
Voltage-dependent anion-selective	Vdac1	VDAC1_MOUSE	32 kDa	0	0	0	5	3	10
Microfibril-associated glycoprotein	Mfap4	MFAP4_MOUSE	29 kDa	0	0	0	6	6	10
Sarcoplasmic/endoplasmic reticulu	Atp2a2	AT2A2_MOUSE	115 kDa	0	6	0	6	4	10
Actin, cytoplasmic 1	Actb	ACTB_MOUSE	42 kDa	0	0	0	12	7	10
Collagen alpha-3(IV) chain	Col4a3	CO4A3_MOUSE	162 kDa	0	2	0	20	6	10
Keratin, type II cuticular Hb5	Krt85	KRT85_MOUSE	56 kDa	6	2	6	6	32	10
Keratin, type II cytoskeletal 5	Krt5	K2C5_MOUSE	62 kDa	10	7	11	25	15	10
Platelet glycoprotein 4	Cd36	CD36_MOUSE	53 kDa	0	0	0	7	4	9

Fibrinogen beta chain	Fgb	FIBB_MOUSE	55 kDa	0	0	0	11	3	9
Laminin subunit alpha-4	Lama4	LAMA4_MOUSE	202 kDa	0	0	0	14	2	9
Periostin	Postn	POSTN_MOUSE	93 kDa	0	3	0	10	7	9
Collagen alpha-1(V) chain	Col5a1	CO5A1_MOUSE	184 kDa	2	4	2	12	6	9
Myosin-4	Myh4	MYH4_MOUSE	223 kDa	0	13	0	14	4	9
Elastin	Eln	ELN_MOUSE	72 kDa	0	6	2	12	11	9
Filamin-A	Flna	FLNA_MOUSE	281 kDa	0	4	0	13	8	8
Collagen alpha-2(V) chain	Col5a2	CO5A2_MOUSE	145 kDa	3	15	0	13	8	8
Keratin, type I cytoskeletal 10	Krt10	K1C10_MOUSE	58 kDa	17	10	19	10	10	8
Catenin alpha-1	Ctnna1	CTNA1_MOUSE	100 kDa	0	0	0	11	1	7
Keratin, type II cuticular Hb1	Krt81	KRT81_MOUSE	53 kDa	0	0	0	0	62	7
Dipeptidase 1	Dpep1	DPEP1_MOUSE	46 kDa	0	0	0	6	3	6
Caveolin-1	Cav1	CAV1_MOUSE	21 kDa	0	0	0	6	3	6
Cytochrome c oxidase subunit 2	Mtco2	COX2_MOUSE	26 kDa	0	0	0	8	4	6
Keratin, type II cuticular 87	Krt87	KRT87_MOUSE	55 kDa	0	0	0	0	84	6
Plasmalemma vesicle-associated p	Plvap	PLVAP_MOUSE	50 kDa	0	0	0	7	4	5
Sarcoplasmic/endoplasmic reticulu	Atp2a1	AT2A1_MOUSE	109 kDa	0	7	0	3	3	5
MICOS complex subunit Mic60	Immt	MIC60_MOUSE	84 kDa	0	0	0	2	0	4
Phosphate carrier protein, mitocho	Slc25a3	MPCP_MOUSE	40 kDa	0	0	0	3	1	4
Voltage-dependent anion-selective	Vdac2	VDAC2_MOUSE	32 kDa	0	1	0	2	1	4
Alpha-actinin-2	Actn2	ACTN2_MOUSE	104 kDa	0	0	0	5	0	4
Laminin subunit alpha-2	Lama2	LAMA2_MOUSE	344 kDa	0	0	0	5	0	4
Hemoglobin subunit alpha	Hba	HBA_MOUSE	15 kDa	0	0	0	4	2	4
Tubulin beta-4B chain	Tubb4b	TBB4B_MOUSE	50 kDa	0	0	0	4	2	4
Keratin, type I cytoskeletal 19	Krt19	K1C19_MOUSE	45 kDa	0	0	0	3	3	4
Histone H3.1	Hist1h3a	H31_MOUSE	15 kDa	0	0	0	4	4	4
Cadherin-5	Cdh5	CADH5_MOUSE	88 kDa	0	0	0	6	2	4
Pulmonary surfactant-associated p	Sftpb	PSPB_MOUSE	42 kDa	0	0	0	4	4	4
Serpin H1	Serpinh1	SERPH_MOUSE	47 kDa	0	0	0	7	4	4
Myosin-1	Myh1	MYH1_MOUSE	223 kDa	0	4	0	10	0	4
Hemoglobin subunit beta-1	Hbb-b1	HBB1_MOUSE	16 kDa	0	1	0	10	9	4
Spectrin beta chain, non-erythrocy	Sptbn1	SPTB2_MOUSE	274 kDa	0	0	0	19	2	4
Keratin, type I cuticular Ha1	Krt31	K1H1_MOUSE	47 kDa	0	0	0	0	68	4
Unconventional myosin-Ic	Myo1c	MYO1C_MOUSE	122 kDa	0	0	0	2	0	3
Spectrin alpha chain, erythrocytic 1	Spta1	SPTA1_MOUSE	280 kDa	0	0	0	6	0	3
Laminin subunit gamma-2	Lamc2	LAMC2_MOUSE	130 kDa	0	4	0	2	0	3
Clathrin heavy chain 1	Cltc	CLH1_MOUSE	192 kDa	0	0	0	7	0	3
Nidogen-2	Nid2	NID2_MOUSE	154 kDa	0	0	0	5	2	3
Lamin-B1	Lmnb1	LMNB1_MOUSE	67 kDa	0	0	0	8	3	3
Keratin, type II cytoskeletal 2 epide	Krt2	K22E_MOUSE	71 kDa	2	2	5	2	4	3
Keratin, type II cytoskeletal 79	Krt79	K2C79_MOUSE	58 kDa	2	2	4	3	5	3
Spectrin beta chain, erythrocytic	Sptb	SPTB1_MOUSE	245 kDa	0	0	0	20	5	3
Keratin, type II cytoskeletal 8	Krt8	K2C8_MOUSE	55 kDa	3	1	4	5	13	3
Transmembrane protein 43	Tmem43	TMM43_MOUSE	45 kDa	0	0	0	1	0	2
Calnexin	Canx	CALX_MOUSE	67 kDa	0	0	0	2	0	2
Catenin delta-1	Ctnnd1	CTND1_MOUSE	105 kDa	0	0	0	2	0	2
Periaxin	Prx	PRAX_MOUSE	148 kDa	0	1	0	1	0	2
60S ribosomal protein L15	Rpl15	RL15_MOUSE	24 kDa	0	0	0	2	2	2
40S ribosomal protein S2	Rps2	RS2_MOUSE	31 kDa	0	0	0	3	2	2
Myosin-10	Myh10	MYH10_MOUSE	229 kDa	0	0	0	5	1	2
Lamina-associated polypeptide 2,	Tmpo	LAP2B_MOUSE	50 kDa	0	0	0	6	1	2
Heterogeneous nuclear ribonucleo	Hnrnpk	HNRPK_MOUSE	51 kDa	0	2	0	3	3	2
Biglycan	Bgn	PGS1_MOUSE	42 kDa	3	4	1	2	0	2
Keratin, type II cytoskeletal 1	Krt1	K2C1_MOUSE	66 kDa	2	2	2	2	2	2
Ubiquitin-60S ribosomal protein L4	Uba52	RL40_MOUSE	15 kDa	0	2	0	4	4	2
Ankyrin-1	Ank1	ANK1_MOUSE	204 kDa	0	0	0	11	4	2
Prelamin-A/C	Lmna	LMNA_MOUSE	74 kDa	1	4	3	8	0	2
Cytochrome b5 type B	Cyb5b	CYB5B_MOUSE	16 kDa	0	0	0	1	0	1
Collagen alpha-1(VII) chain	Col7a1	CO7A1_MOUSE	295 kDa	0	2	0	1	0	1
Voltage-dependent anion-selective	Vdac3	VDAC3_MOUSE	31 kDa	0	0	0	2	2	1
Keratin, type I cytoskeletal 18	Krt18	K1C18_MOUSE	48 kDa	0	2	0	4	1	1
Integrin beta-1	Itgb1	ITB1_MOUSE	88 kDa	0	1	0	5	2	1
Keratin, type I cuticular Ha2	Krt32	K1H2_MOUSE	46 kDa	0	0	0	0	10	1
Keratin, type I cytoskeletal 14	Krt14	K1C14_MOUSE	53 kDa	5	5	4	6	10	1
Keratin, type I cytoskeletal 13	Krt13	K1C13_MOUSE	48 kDa	10	18	0	28	18	1
Filamin-C	Flnc	FLNC_MOUSE	291 kDa	0	1	0	0	0	0
ADP/ATP translocase 2	Slc25a5	ADT2_MOUSE	33 kDa	0	0	0	0	1	0
Catenin beta-1	Ctnnb1	CTNB1_MOUSE	85 kDa	0	0	0	1	0	0

Elongation factor 2	Eef2	EF2_MOUSE	95 kDa	0	0	0	0	1	0
Afadin	Afdn	AFAD_MOUSE	207 kDa	0	0	0	1	0	0
Heat shock protein beta-1	Hspb1	HSPB1_MOUSE	23 kDa	0	0	0	0	1	0
Epiplakin	Eppk1	EPIPL_MOUSE	725 kDa	0	0	0	2	0	0
ATP synthase subunit beta, mitoch	Atp5b	ATPB_MOUSE	56 kDa	0	0	0	0	2	0
Elongation factor 1-alpha 1	Eef1a1	EF1A1_MOUSE	50 kDa	0	0	0	0	2	0
Splicing factor, proline- and glutam	Sfpq	SFPQ_MOUSE	75 kDa	0	0	0	0	2	0
60S ribosomal protein L27a	Rpl27a	RL27A_MOUSE	17 kDa	0	0	0	1	1	0
Amine oxidase [flavin-containing] A	Maoa	AOFA_MOUSE	60 kDa	0	0	0	2	0	0
Probable ATP-dependent RNA hel	Ddx17	DDX17_MOUSE	72 kDa	0	0	0	2	0	0
Leucine-rich repeat-containing pro	Lrrc15	LRC15_MOUSE	64 kDa	0	0	0	0	2	0
Heterogeneous nuclear ribonucleo	Hnrnph1	HNRH1_MOUSE	49 kDa	0	0	0	2	0	0
Clusterin	Clu	CLUS_MOUSE	52 kDa	0	0	0	2	0	0
Peptidyl-prolyl cis-trans isomerase	Ppia	PPIA_MOUSE	18 kDa	0	0	0	0	2	0
Dolichyl-diphosphooligosaccharide	Rpn2	RPN2_MOUSE	69 kDa	0	2	0	1	0	0
Keratin, type II cytoskeletal 75	Krt75	K2C75_MOUSE	60 kDa	0	0	0	0	3	0
Plakophilin-1	Pkp1	PKP1_MOUSE	81 kDa	0	0	0	0	3	0
Myoferlin	Myof	MYOF_MOUSE	233 kDa	0	0	0	3	0	0
Apolipoprotein A-I	Apoa1	APOA1_MOUSE	31 kDa	0	0	0	3	0	0
Collagen alpha-1(II) chain	Col2a1	CO2A1_MOUSE	142 kDa	2	2	0	0	0	0
Keratin-associated protein 3-2	Krtap3-2	KRA32_MOUSE	11 kDa	0	0	0	0	4	0
Keratin, type I cuticular Ha6	Krt36	KRT36_MOUSE	53 kDa	0	0	0	0	4	0
Keratin, type II cytoskeletal 7	Krt7	K2C7_MOUSE	51 kDa	0	0	0	0	4	0
Histone H2A type 1-F	Hist1h2af	H2A1F_MOUSE	14 kDa	0	0	0	0	6	0
Tubulin beta-3 chain	Tubb3	TBB3_MOUSE	50 kDa	0	0	0	4	2	0
Tight junction protein ZO-1	Tjp1	ZO1_MOUSE	195 kDa	0	2	0	3	1	0
Alpha-actinin-3	Actn3	ACTN3_MOUSE	103 kDa	0	2	0	4	1	0
Spectrin alpha chain, non-erythroc	Sptan1	SPTN1_MOUSE	285 kDa	0	0	0	6	1	0
Keratin, type II cytoskeletal 1b	Krt77	K2C1B_MOUSE	61 kDa	4	0	2	2	0	0
Keratin, type I cytoskeletal 16	Krt16	K1C16_MOUSE	52 kDa	0	0	0	0	8	0
Serum albumin	Alb	ALBU_MOUSE	69 kDa	0	0	0	7	2	0
Keratin, type I cuticular Ha3-II	Krt33b	KT33B_MOUSE	46 kDa	0	0	0	0	9	0
Keratin, type I cuticular Ha4	Krt34	KRT34_MOUSE	45 kDa	0	0	0	0	9	0
Pulmonary surfactant-associated p	Sftpa1	SFTPA_MOUSE	26 kDa	0	2	2	4	1	0
Annexin A2	Anxa2	ANXA2_MOUSE	39 kDa	0	0	0	0	9	0
Keratin, type I cytoskeletal 17	Krt17	K1C17_MOUSE	48 kDa	0	0	0	0	11	0
14-3-3 protein sigma	Sfn	1433S_MOUSE	28 kDa	0	0	0	0	11	0
Keratin, type I cuticular Ha5	Krt35	KRT35_MOUSE	51 kDa	0	0	0	0	12	0
Keratin, type II cytoskeletal 6A	Krt6a	K2C6A_MOUSE	59 kDa	0	4	0	0	9	0
Desmoplakin	Dsp	DESP_MOUSE	333 kDa	0	0	0	1	17	0
Histone H2B type 1-B	Hist1h2bb	H2B1B_MOUSE	14 kDa	0	0	0	2	16	0
Junction plakoglobin	Jup	PLAK_MOUSE	82 kDa	0	0	0	10	21	0
Keratin, type II cytoskeletal 4	Krt4	K2C4_MOUSE	56 kDa	18	17	4	52	0	0

Muscle				**CNBr**			**NH_2OH**		
Identified Proteins	**Gene**	**Accession Number**	**Molecular Weight**	*Muscle 1*	*Muscle 2*	*Muscle 3*	*Muscle 1*	*Muscle 2*	*Muscle 3*
Titin	Ttn	TITIN_MOUSE	3906 kDa	2778	1132	1987	2405	2522	2218
Myosin-4	Myh4	MYH4_MOUSE	223 kDa	464	533	681	471	554	763
Collagen alpha-1(I) chain	Col1a1	CO1A1_MOUSE	138 kDa	172	224	180	249	248	212
Sarcoplasmic/endoplasmic reticulu	Atp2a1	AT2A1_MOUSE	109 kDa	141	190	179	321	268	142
Collagen alpha-1(III) chain	Col3a1	CO3A1_MOUSE	139 kDa	95	136	113	143	133	132
Collagen alpha-2(I) chain	Col1a2	CO1A2_MOUSE	130 kDa	120	155	134	172	185	131
Alpha-actinin-3	Actn3	ACTN3_MOUSE	103 kDa	163	110	168	148	126	124
Actin, alpha skeletal muscle	Acta1	ACTS_MOUSE	42 kDa	57	13	49	94	104	64
AMP deaminase 1	Ampd1	AMPD1_MOUSE	86 kDa	28	12	23	33	24	30
ADP/ATP translocase 1	Slc25a4	ADT1_MOUSE	33 kDa	55	42	52	55	53	22
Filamin-C	Flnc	FLNC_MOUSE	291 kDa	70	20	62	39	59	18
Alpha-actinin-2	Actn2	ACTN2_MOUSE	104 kDa	25	8	26	44	53	10
Keratin, type I cytoskeletal 10	Krt10	K1C10_MOUSE	58 kDa	6	9	6	4	3	9
Myosin light chain 1/3, skeletal mu	Myl1	MYL1_MOUSE	21 kDa	6	19	9	12	9	9
Voltage-dependent anion-selective	Vdac1	VDAC1_MOUSE	32 kDa	18	4	11	7	6	7
Myosin-1	Myh1	MYH1_MOUSE	223 kDa	48	17	61	76	85	7
Keratin, type II cuticular 87	Krt87	KRT87_MOUSE	55 kDa	4	0	0	0	0	6
Keratin, type II cuticular Hb5	Krt85	KRT85_MOUSE	56 kDa	2	1	0	2	4	6
Myomesin-1	Myom1	MYOM1_MOUSE	185 kDa	61	6	17	6	10	6
Keratin, type I cuticular Ha3-I	Krt33a	KT33A_MOUSE	46 kDa	2	0	0	0	0	5
Keratin, type II cytoskeletal 5	Krt5	K2C5_MOUSE	62 kDa	2	4	2	4	4	5

Collagen alpha-1(IV) chain	Col4a1	CO4A1_MOUSE	161 kDa	1	2	3	10	5	4
Collagen alpha-2(IV) chain	Col4a2	CO4A2_MOUSE	167 kDa	1	1	0	15	8	4
Collagen alpha-2(V) chain	Col5a2	CO5A2_MOUSE	145 kDa	3	8	2	8	6	4
Cytochrome c oxidase subunit 2	Mtco2	COX2_MOUSE	26 kDa	0	0	0	21	20	4
Myosin regulatory light chain 2, ske	Mylpf	MLRS_MOUSE	19 kDa	0	2	0	2	5	3
Keratin, type II cytoskeletal 2 epide	Krt2	K22E_MOUSE	71 kDa	0	2	1	1	2	2
Tropomyosin alpha-1 chain	Tpm1	TPM1_MOUSE	33 kDa	0	2	0	1	3	2
Tubulin beta-5 chain	Tubb5	TBB5_MOUSE	50 kDa	2	0	0	2	3	2
Keratin, type II cytoskeletal 1b	Krt77	K2C1B_MOUSE	61 kDa	2	0	1	2	2	2
Myosin-7	Myh7	MYH7_MOUSE	223 kDa	0	0	0	0	7	2
Keratin, type II cytoskeletal 1	Krt1	K2C1_MOUSE	66 kDa	2	2	2	2	2	2
Keratin, type II cytoskeletal 79	Krt79	K2C79_MOUSE	58 kDa	2	4	2	2	2	2
Triadin	Trdn	TRDN_MOUSE	78 kDa	2	4	4	2	0	2
Ubiquitin-60S ribosomal protein L4	Uba52	RL40_MOUSE (+3)	15 kDa	1	4	2	3	3	2
Basement membrane-specific hep	Hspg2	PGBM_MOUSE	398 kDa	10	1	0	1	2	2
Keratin, type I cytoskeletal 14	Krt14	K1C14_MOUSE	53 kDa	2	4	2	2	4	2
Collagen alpha-2(VI) chain	Col6a2	CO6A2_MOUSE	110 kDa	6	2	3	2	4	2
Alpha-actinin-1	Actn1	ACTN1_MOUSE	103 kDa	7	2	5	2	2	2
Collagen alpha-1(V) chain	Col5a1	CO5A1_MOUSE	184 kDa	1	4	2	8	4	2
Collagen alpha-1(VI) chain	Col6a1	CO6A1_MOUSE	108 kDa	23	5	10	13	12	2
Obscurin	Obscn	OBSCN_MOUSE	966 kDa	30	2	12	9	16	2
Plectin	Plec	PLEC_MOUSE	534 kDa	48	13	47	64	50	2
Keratin, type II cuticular Hb1	Krt81	KRT81_MOUSE	53 kDa	0	0	0	0	0	1
Keratin, type I cuticular Ha4	Krt34	KRT34_MOUSE	45 kDa	0	0	0	0	0	1
Collagen alpha-1(II) chain	Col2a1	CO2A1_MOUSE	142 kDa	2	3	2	0	0	1
ATP synthase F(0) complex subun	Atp5f1	AT5F1_MOUSE	29 kDa	1	0	2	4	1	1
NADH dehydrogenase [ubiquinone	Ndufa9	NDUA9_MOUSE	43 kDa	2	1	1	6	7	1
Kelch-like protein 41	Klhl41	KLH41_MOUSE	68 kDa	10	2	5	4	4	1
Desmin	Des	DESM_MOUSE	53 kDa	7	11	7	9	7	1
Ryanodine receptor 1	Ryr1	RYR1_MOUSE	565 kDa	12	13	13	36	13	1
Fibrillin-1	Fbn1	FBN1_MOUSE	312 kDa	79	0	0	9	4	1
Hemoglobin subunit beta-1	Hbb-b1	HBB1_MOUSE	16 kDa	0	0	0	0	1	0
Voltage-dependent anion-selective	Vdac2	VDAC2_MOUSE	32 kDa	0	0	1	0	0	0
Filamin-A	Flna	FLNA_MOUSE	281 kDa	1	0	0	0	0	0
Caveolin-1	Cav1	CAV1_MOUSE	21 kDa	0	0	0	1	0	0
Plakophilin-1	Pkp1	PKP1_MOUSE	81 kDa	0	0	0	1	0	0
Cytochrome c oxidase subunit 5A,	Cox5a	COX5A_MOUSE	16 kDa	0	1	0	0	0	0
Glyceraldehyde-3-phosphate dehy	Gapdh	G3P_MOUSE	36 kDa	0	1	0	0	0	0
Glycogen [starch] synthase, liver	Gys2	GYS2_MOUSE	81 kDa	0	0	1	0	0	0
NADH-ubiquinone oxidoreductase	Mtnd5	NU5M_MOUSE	68 kDa	0	0	0	1	0	0
Succinate dehydrogenase cytochr	Sdhc	C560_MOUSE	18 kDa	0	0	0	1	0	0
ATP synthase subunit alpha, mitoc	Atp5a1	ATPA_MOUSE	60 kDa	0	0	0	1	1	0
Laminin subunit beta-2	Lamb2	LAMB2_MOUSE	197 kDa	2	0	0	0	0	0
Biglycan	Bgn	PGS1_MOUSE	42 kDa	2	0	0	0	0	0
MICOS complex subunit Mic60	Immt	MIC60_MOUSE	84 kDa	0	0	0	2	0	0
Keratin, type II cytoskeletal 6A	Krt6a	K2C6A_MOUSE	59 kDa	0	2	0	0	0	0
Nidogen-1	Nid1	NID1_MOUSE	137 kDa	2	0	0	0	0	0
Tubulin beta-4B chain	Tubb4b	TBB4B_MOUSE	50 kDa	1	0	0	1	0	0
Tubulin beta-3 chain	Tubb3	TBB3_MOUSE	50 kDa	1	0	0	1	0	0
Ankyrin-1	Ank1	ANK1_MOUSE	204 kDa	0	0	0	2	0	0
L-lactate dehydrogenase A chain	Ldha	LDHA_MOUSE	36 kDa	0	2	0	0	0	0
NADH dehydrogenase [ubiquinone	Ndufb5	NDUB5_MOUSE	22 kDa	0	0	2	0	0	0
Acyl-CoA dehydrogenase family m	Acad9	ACAD9_MOUSE	69 kDa	0	0	0	0	2	0
Microsomal glutathione S-transfera	Mgst3	MGST3_MOUSE	17 kDa	0	0	0	1	1	0
Sarcalumenin	Srl	SRCA_MOUSE	99 kDa	0	2	0	0	0	0
NADH-ubiquinone oxidoreductase	Mtnd1	NU1M_MOUSE	36 kDa	0	0	0	3	0	0
Glycogen [starch] synthase, muscl	Gys1	GYS1_MOUSE	84 kDa	0	0	0	2	1	0
Cytochrome b-c1 complex subunit	Uqcrc2	QCR2_MOUSE	48 kDa	2	0	0	2	0	0
Laminin subunit beta-1	Lamb1	LAMB1_MOUSE	197 kDa	4	0	0	0	0	0
Glycogen phosphorylase, liver forn	Pygl	PYGL_MOUSE	97 kDa	2	0	2	0	0	0
Cytochrome c oxidase subunit NDI	Ndufa4	NDUA4_MOUSE	9 kDa	0	0	0	2	2	0
Parvalbumin alpha	Pvalb	PRVA_MOUSE	12 kDa	0	0	0	0	4	0
Mitochondrial carrier homolog 2	Mtch2	MTCH2_MOUSE	33 kDa	1	0	1	3	0	0
NADH-ubiquinone oxidoreductase	Mtnd4	NU4M_MOUSE	52 kDa	0	1	1	3	0	0
Phosphorylase b kinase regulatory	Phka1	KPB1_MOUSE	139 kDa	3	2	0	0	0	0
Sodium/potassium-transporting AT	Atp1a2	AT1A2_MOUSE	112 kDa	0	0	0	4	1	0
Vesicle-associated membrane pro	Vapa	VAPA_MOUSE	28 kDa	0	0	2	2	1	0
Cytochrome c oxidase subunit 1	Mtco1	COX1_MOUSE	57 kDa	0	2	2	2	0	0

LIM domain-binding protein 3	Ldb3	LDB3_MOUSE	76 kDa	0	0	0	3	3	0
Very-long-chain enoyl-CoA reducta	Tecr	TECR_MOUSE	36 kDa	2	1	0	4	0	0
Tubulin alpha-4A chain	Tuba4a	TBA4A_MOUSE	50 kDa	4	0	3	0	0	0
Cytochrome c oxidase subunit 4 is	Cox4i1	COX41_MOUSE	20 kDa	0	0	0	6	2	0
Myosin-binding protein C, fast-type	Mybpc2	MYPC2_MOUSE	127 kDa	6	0	2	0	0	0
Protein-cysteine N-palmitoyltransfe	Hhatl	HHATL_MOUSE	56 kDa	2	0	1	4	1	0
NADH-ubiquinone oxidoreductase	Ndufs1	NDUS1_MOUSE	80 kDa	7	0	0	2	0	0
ATP synthase subunit a	Mtatp6	ATP6_MOUSE	25 kDa	2	3	4	0	0	0
ATP synthase subunit f, mitochond	Atp5j2	ATPK_MOUSE	10 kDa	2	0	2	2	3	0
Dystrophin	Dmd	DMD_MOUSE	426 kDa	4	0	4	0	1	0
Creatine kinase M-type	Ckm	KCRM_MOUSE	43 kDa	2	4	0	1	2	0
NADH dehydrogenase [ubiquinone	Ndufb8	NDUB8_MOUSE	22 kDa	0	0	0	5	4	0
Cytochrome b-c1 complex subunit	Uqcrc1	QCR1_MOUSE	53 kDa	6	1	2	1	0	0
Cytochrome c1, heme protein, mito	Cyc1	CY1_MOUSE	35 kDa	4	0	2	2	2	0
Dihydrolipoyllysine-residue acetylt	Dlat	ODP2_MOUSE	68 kDa	3	0	3	3	1	0
Glycogen phosphorylase, muscle f	Pygm	PYGM_MOUSE	97 kDa	3	3	0	1	3	0
NADH dehydrogenase [ubiquinone	Ndufs3	NDUS3_MOUSE	30 kDa	4	0	2	2	4	0
Myozenin-1	Myoz1	MYOZ1_MOUSE	31 kDa	0	0	0	7	5	0
Dehydrogenase/reductase SDR fa	Dhrs7c	DRS7C_MOUSE	34 kDa	4	2	2	2	2	0
Collagen alpha-1(XII) chain	Col12a1	COCA1_MOUSE	340 kDa	6	2	1	0	4	0
Laminin subunit gamma-1	Lamc1	LAMC1_MOUSE	177 kDa	7	1	1	2	3	0
Voltage-dependent anion-selective	Vdac3	VDAC3_MOUSE	31 kDa	4	2	4	2	2	0
Mitochondrial 2-oxoglutarate/malat	Slc25a11	M2OM_MOUSE	34 kDa	3	0	5	4	3	0
Carnitine O-palmitoyltransferase 1	Cpt1b	CPT1B_MOUSE	88 kDa	2	2	1	7	4	0
NADH dehydrogenase [ubiquinone	Ndufs2	NDUS2_MOUSE	53 kDa	4	2	6	1	3	0
Myosin-8	Myh8	MYH8_MOUSE	223 kDa	2	0	5	3	7	0
Tubulin alpha-1C chain	Tuba1c	TBA1C_MOUSE	50 kDa	8	4	5	1	2	0
Cartilage intermediate layer protei	Cilp2	CILP2_MOUSE	126 kDa	3	2	1	6	9	0
Myelin protein P0	Mpz	MYP0_MOUSE	28 kDa	0	0	0	12	11	0
Calcium-binding mitochondrial carr	Slc25a13	CMC2_MOUSE	74 kDa	6	4	5	5	4	0
Phosphate carrier protein, mitocho	Slc25a3	MPCP_MOUSE	40 kDa	2	1	2	11	9	0
Laminin subunit alpha-2	Lama2	LAMA2_MOUSE	344 kDa	11	0	3	5	7	0
Trimeric intracellular cation channe	Tmem38a	TM38A_MOUSE	33 kDa	5	4	8	4	5	0
Reticulon-2	Rtn2	RTN2_MOUSE	51 kDa	8	6	9	5	7	0
Calcium-binding mitochondrial carr	Slc25a12	CMC1_MOUSE	75 kDa	11	6	13	4	10	0

Liver				**CNBr**			**NH_2OH**		
Identified Proteins	**Gene**	**Accession Number**	**Molecular Weight**	*Liver 1*	*Liver 2*	*Liver 3*	*Liver 1*	*Liver 2*	*Liver 3*
Collagen alpha-1(I) chain	Col1a1	CO1A1_MOUSE	138 kDa	466	317	347	195	220	246
Collagen alpha-2(I) chain	Col1a2	CO1A2_MOUSE	130 kDa	302	208	211	104	122	150
Collagen alpha-1(III) chain	Col3a1	CO3A1_MOUSE	139 kDa	227	204	250	123	145	110
Carbamoyl-phosphate synthase [a	Cps1	CPSM_MOUSE	165 kDa	102	174	174	47	48	57
Plectin	Plec	PLEC_MOUSE	534 kDa	138	114	112	54	86	52
Sarcoplasmic/endoplasmic reticulu	Atp2a1	AT2A1_MOUSE	109 kDa	111	167	101	1	40	33
Uricase	Uox	URIC_MOUSE	35 kDa	71	81	97	23	29	30
ADP/ATP translocase 1	Slc25a4	ADT1_MOUSE	33 kDa	77	109	89	18	47	28
Keratin, type I cytoskeletal 18	Krt18	K1C18_MOUSE	48 kDa	104	99	105	29	30	27
Actin, alpha skeletal muscle	Acta1	ACTS_MOUSE	42 kDa	75	122	101	6	37	25
Calcium-binding mitochondrial carr	Slc25a13	CMC2_MOUSE	74 kDa	83	101	129	20	26	25
ADP/ATP translocase 2	Slc25a5	ADT2_MOUSE	33 kDa	34	47	70	19	22	24
Keratin, type II cytoskeletal 8	Krt8	K2C8_MOUSE	55 kDa	120	110	109	35	33	23
Band 3 anion transport protein	Slc4a1	B3AT_MOUSE	103 kDa	21	25	32	16	20	22
Microsomal glutathione S-transfera	Mgst1	MGST1_MOUSE	18 kDa	26	44	44	20	28	22
Cytochrome c oxidase subunit 2	Mtco2	COX2_MOUSE	26 kDa	32	46	44	12	26	21
Collagen alpha-1(VI) chain	Col6a1	CO6A1_MOUSE	108 kDa	70	53	54	22	18	20
Titin	Ttn	TITIN_MOUSE	3906 kDa	218	428	236	0	134	20
Desmoplakin	Dsp	DESP_MOUSE	333 kDa	32	31	25	13	27	17
Alpha-actinin-2	Actn2	ACTN2_MOUSE	104 kDa	49	78	55	0	28	17
Epiplakin	Eppk1	EPIPL_MOUSE	725 kDa	24	22	28	7	22	16
Tubulin alpha-1C chain	Tuba1c	TBA1C_MOUSE	50 kDa	61	63	71	10	22	16
Dolichyl-diphosphooligosaccharide	Rpn1	RPN1_MOUSE	69 kDa	47	58	74	19	24	15
Phosphate carrier protein, mitocho	Slc25a3	MPCP_MOUSE	40 kDa	20	38	43	9	18	14
Cytosolic 10-formyltetrahydrofolate	Aldh1l1	AL1L1_MOUSE	99 kDa	18	50	44	7	13	14
Myosin-1	Myh1	MYH1_MOUSE	223 kDa	132	201	125	0	32	14
MICOS complex subunit Mic60	Immt	MIC60_MOUSE	84 kDa	21	25	44	15	10	13
Mitochondrial carrier homolog 2	Mtch2	MTCH2_MOUSE	33 kDa	30	39	48	11	15	13
Keratin, type I cytoskeletal 10	Krt10	K1C10_MOUSE	58 kDa	8	3	13	11	9	12

Long-chain-fatty-acid--CoA ligase	Acsl1	ACSL1_MOUSE	78 kDa	19	40	34	3	9	12
Dolichyl-diphosphooligosaccharide	Rpn2	RPN2_MOUSE	69 kDa	32	44	49	7	15	12
Myosin-4	Myh4	MYH4_MOUSE	223 kDa	191	289	193	2	43	12
Collagen alpha-1(IV) chain	Col4a1	CO4A1_MOUSE	161 kDa	27	27	27	9	11	11
40S ribosomal protein S2	Rps2	RS2_MOUSE	31 kDa	10	10	12	5	9	10
3-ketoacyl-CoA thiolase, mitochon	Acaa2	THIM_MOUSE	42 kDa	14	18	13	1	9	10
Mitochondrial ornithine transporter	Slc25a15	ORNT1_MOUSE	33 kDa	7	12	20	9	12	10
Fibronectin	Fn1	FINC_MOUSE	273 kDa	36	27	27	10	18	10
Tubulin beta-5 chain	Tubb5	TBB5_MOUSE	50 kDa	51	41	56	11	9	10
Hemoglobin subunit beta-1	Hbb-b1	HBB1_MOUSE	16 kDa	7	26	20	8	9	9
Collagen alpha-2(IV) chain	Col4a2	CO4A2_MOUSE	167 kDa	29	26	27	10	12	9
Argininosuccinate synthase	Ass1	ASSY_MOUSE	47 kDa	18	23	31	7	11	8
Collagen alpha-2(VI) chain	Col6a2	CO6A2_MOUSE	110 kDa	55	43	44	7	10	8
Ubiquitin-60S ribosomal protein L4	Uba52	RL40_MOUSE	15 kDa	11	12	10	5	7	7
Very-long-chain enoyl-CoA reducta	Tecr	TECR_MOUSE	36 kDa	12	18	19	5	8	7
Cytochrome c1, heme protein, mito	Cyc1	CY1_MOUSE	35 kDa	12	15	20	5	11	7
Tricarboxylate transport protein, m	Slc25a1	TXTP_MOUSE	34 kDa	9	16	29	8	10	7
Retinol dehydrogenase 7	Rdh7	RDH7_MOUSE	36 kDa	17	36	27	2	5	7
Mitochondrial carnitine/acylcarnitin	Slc25a20	MCAT_MOUSE	33 kDa	19	28	28	2	11	7
Cytochrome b5 type B	Cyb5b	CYB5B_MOUSE	16 kDa	4	4	5	7	8	6
Calnexin	Canx	CALX_MOUSE	67 kDa	4	9	8	6	2	6
Kynurenine 3-monooxygenase	Kmo	KMO_MOUSE	55 kDa	6	11	9	1	8	6
3-beta-hydroxysteroid-Delta(8),De	Ebp	EBP_MOUSE	26 kDa	7	8	12	5	7	6
NADH-ubiquinone oxidoreductase	Ndufs1	NDUS1_MOUSE	80 kDa	6	13	25	2	3	6
Mitochondrial amidoxime-reducing	1-Mar	MARC1_MOUSE	38 kDa	10	11	15	4	9	6
Cytochrome P450 2C40	Cyp2c40	CP240_MOUSE	56 kDa	8	23	18	0	6	6
NADH dehydrogenase [ubiquinone	Ndufs2	NDUS2_MOUSE	53 kDa	11	17	20	2	6	6
Membrane-associated progesteron	Pgrmc1	PGRC1_MOUSE	22 kDa	10	19	20	4	7	6
Junction plakoglobin	Jup	PLAK_MOUSE	82 kDa	18	16	15	5	8	6
UDP-glucuronosyltransferase 1-1	Ugt1a1	UD11_MOUSE	60 kDa	10	23	20	4	10	6
Prohibitin	Phb	PHB_MOUSE	30 kDa	10	21	26	4	6	6
Cytochrome P450 2C29	Cyp2c29	CP2CT_MOUSE	56 kDa	15	31	30	1	4	6
Fibrinogen gamma chain	Fgg	FIBG_MOUSE	49 kDa	39	15	17	6	6	6
60S ribosomal protein L7a	Rpl7a	RL7A_MOUSE	30 kDa	21	25	27	8	4	6
Actin, cytoplasmic 1	Actb	ACTB_MOUSE	42 kDa	33	40	47	4	7	6
Alcohol dehydrogenase 1	Adh1	ADH1_MOUSE	40 kDa	28	56	54	2	5	6
Gap junction beta-1 protein	Gjb1	CXB1_MOUSE	32 kDa	0	0	1	3	7	5
Trifunctional enzyme subunit alpha	Hadha	ECHA_MOUSE	83 kDa	2	5	8	2	3	5
Keratin, type II cytoskeletal 5	Krt5	K2C5_MOUSE	62 kDa	4	4	7	9	7	5
NADH dehydrogenase [ubiquinone	Ndufa9	NDUA9_MOUSE	43 kDa	9	10	17	0	9	5
Protein transport protein Sec61 su	Sec61a1	S61A1_MOUSE	52 kDa	5	16	18	2	6	5
Cytochrome b5	Cyb5a	CYB5_MOUSE	15 kDa	6	14	18	4	5	5
Cadherin-2	Cdh2	CADH2_MOUSE	100 kDa	14	15	12	2	8	5
Elastin	Eln	ELN_MOUSE	72 kDa	15	15	17	5	9	5
Fatty acid synthase	Fasn	FAS_MOUSE	272 kDa	16	30	15	2	2	5
Heat shock protein HSP 90-beta	Hsp90ab1	HS90B_MOUSE	83 kDa	12	26	22	5	3	5
Arginase-1	Arg1	ARGI1_MOUSE	35 kDa	15	19	20	5	11	5
Cytochrome c oxidase subunit 4 is	Cox4i1	COX41_MOUSE	20 kDa	17	25	25	2	7	5
NADH-cytochrome b5 reductase 3	Cyb5r3	NB5R3_MOUSE	34 kDa	11	39	28	1	2	5
60S ribosomal protein L10a	Rpl10a	RL10A_MOUSE	25 kDa	34	27	31	2	8	5
Protein-glutamine gamma-glutamy	Tgm2	TGM2_MOUSE	77 kDa	39	34	37	8	8	5
Keratin, type I cytoskeletal 14	Krt14	K1C14_MOUSE	53 kDa	0	0	2	3	5	4
Sorting and assembly machinery c	Samm50	SAM50_MOUSE	52 kDa	1	0	3	2	4	4
Glutathione S-transferase Mu 7	Gstm7	GSTM7_MOUSE	26 kDa	2	3	5	2	2	4
Cytochrome P450 2C37	Cyp2c37	CP237_MOUSE	56 kDa	3	6	4	1	2	4
Spectrin alpha chain, erythrocytic 1	Spta1	SPTA1_MOUSE	280 kDa	5	2	7	1	3	4
UDP-glucuronosyltransferase 2B1	Ugt2b17	UDB17_MOUSE	61 kDa	3	9	6	1	1	4
Transmembrane protein 256	Tmem256	TM256_MOUSE	12 kDa	4	6	7	0	3	4
Solute carrier organic anion transp	Slco1b2	SO1B2_MOUSE	77 kDa	4	4	4	4	4	4
Keratin, type II cytoskeletal 79	Krt79	K2C79_MOUSE	58 kDa	4	4	5	4	4	4
Regulator of microtubule dynamics	Rmdn3	RMD3_MOUSE	52 kDa	3	3	12	4	3	4
Corticosteroid 11-beta-dehydroger	Hsd11b1	DHI1_MOUSE	32 kDa	2	13	7	1	3	4
60S ribosomal protein L4	Rpl4	RL4_MOUSE	47 kDa	3	8	8	4	5	4
60S ribosomal protein L15	Rpl15	RL15_MOUSE	24 kDa	8	6	7	3	4	4
Tubulin beta-4B chain	Tubb4b	TBB4B_MOUSE	50 kDa	12	8	7	1	1	4
Spectrin beta chain, erythrocytic	Sptb	SPTB1_MOUSE	245 kDa	4	7	7	3	11	4
Alpha-actinin-3	Actn3	ACTN3_MOUSE	103 kDa	9	13	10	1	4	4
Hemoglobin subunit alpha	Hba	HBA_MOUSE	15 kDa	5	14	14	2	4	4

Translocon-associated protein sub	Ssr4	SSRD_MOUSE	19 kDa	8	13	16	2	4	4
Galectin-9	Lgals9	LEG9_MOUSE	40 kDa	10	9	19	3	6	4
Dolichyl-diphosphooligosaccharide	Stt3a	STT3A_MOUSE	81 kDa	5	15	16	6	6	4
Solute carrier family 2, facilitated g	Slc2a2	GTR2_MOUSE	57 kDa	9	16	15	4	5	4
Catenin beta-1	Ctnnb1	CTNB1_MOUSE	85 kDa	17	13	12	4	6	4
Mitochondrial dicarboxylate carrier	Slc25a10	DIC_MOUSE	32 kDa	9	14	20	6	4	4
Dolichyl-diphosphooligosaccharide	Ddost	OST48_MOUSE	49 kDa	20	21	23	4	8	4
Cytochrome P450 2A12	Cyp2a12	CP2AC_MOUSE	56 kDa	19	34	25	2	4	4
Mitochondrial 2-oxoglutarate/malat	Slc25a11	M2OM_MOUSE	34 kDa	24	34	36	3	4	4
ATP synthase subunit alpha, mitoc	Atp5a1	ATPA_MOUSE	60 kDa	27	53	54	1	1	4
Voltage-dependent anion-selective	Vdac1	VDAC1_MOUSE	32 kDa	34	43	46	8	6	4
Myosin-9	Myh9	MYH9_MOUSE	226 kDa	45	58	79	11	15	4
Keratin, type II cytoskeletal 2 epide	Krt2	K22E_MOUSE	71 kDa	0	0	2	1	4	3
Alpha-actinin-1	Actn1	ACTN1_MOUSE	103 kDa	0	2	1	1	4	3
UDP-glucuronosyltransferase 2A3	Ugt2a3	UD2A3_MOUSE	61 kDa	3	6	5	1	2	3
Histone H3.1	Hist1h3a	H31_MOUSE	15 kDa	3	4	5	4	4	3
Cytochrome P450 2F2	Cyp2f2	CP2F2_MOUSE	56 kDa	2	12	6	0	1	3
DnaJ homolog subfamily C membe	Dnajc11	DJC11_MOUSE	63 kDa	2	2	11	1	6	3
NADH dehydrogenase [ubiquinone	Ndufb5	NDUB5_MOUSE	22 kDa	9	8	5	0	2	3
Catenin delta-1	Ctnnd1	CTND1_MOUSE	105 kDa	6	6	10	1	3	3
60S ribosomal protein L27a	Rpl27a	RL27A_MOUSE	17 kDa	6	8	5	3	4	3
Cytochrome c oxidase subunit 1	Mtco1	COX1_MOUSE	57 kDa	11	17	15	0	3	3
Protein transport protein Sec23A	Sec23a	SC23A_MOUSE	86 kDa	16	13	19	3	2	3
Sarcoplasmic/endoplasmic reticulu	Atp2a2	AT2A2_MOUSE	115 kDa	11	19	19	2	5	3
Prohibitin-2	Phb2	PHB2_MOUSE	33 kDa	10	17	24	4	5	3
Fibrinogen alpha chain	Fga	FIBA_MOUSE	87 kDa	37	15	14	3	6	3
Histone H4	Hist1h4a	H4_MOUSE	11 kDa	18	23	24	4	7	3
Bile acyl-CoA synthetase	Slc27a5	S27A5_MOUSE	76 kDa	20	24	25	5	8	3
Cytochrome b-c1 complex subunit	Uqcrc1	QCR1_MOUSE	53 kDa	33	34	52	4	5	3
Clathrin heavy chain 1	Cltc	CLH1_MOUSE	192 kDa	35	54	48	0	1	3
Lamin-B1	Lmnb1	LMNB1_MOUSE	67 kDa	0	1	1	2	1	2
Heterogeneous nuclear ribonucleo	Hnrnpk	HNRPK_MOUSE	51 kDa	0	0	2	2	2	2
Microsomal glutathione S-transfera	Mgst3	MGST3_MOUSE	17 kDa	0	2	0	2	2	2
Keratin, type II cuticular Hb5	Krt85	KRT85_MOUSE	56 kDa	0	1	2	3	2	2
Dolichyl-diphosphooligosaccharide	Stt3b	STT3B_MOUSE	93 kDa	0	0	2	1	5	2
Succinate dehydrogenase cytochro	Sdhc	C560_MOUSE	18 kDa	0	2	2	2	2	2
Probable N-acetyltransferase CML	Cml2	CMLO2_MOUSE	26 kDa	0	3	3	0	3	2
MICOS complex subunit Mic27	Apool	MIC27_MOUSE	29 kDa	2	1	5	0	1	2
60S ribosomal protein L24	Rpl24	RL24_MOUSE	18 kDa	1	2	3	2	2	2
Biglycan	Bgn	PGS1_MOUSE	42 kDa	3	2	2	2	2	2
Protein transport protein Sec31A	Sec31a	SC31A_MOUSE	134 kDa	2	4	2	1	2	2
Cytochrome P450 4A14	Cyp4a14	CP4AE_MOUSE	59 kDa	2	4	5	0	1	2
Collagen alpha-1(II) chain	Col2a1	CO2A1_MOUSE	142 kDa	3	2	2	4	5	2
ATP-citrate synthase	Acly	ACLY_MOUSE	120 kDa	3	7	6	0	0	2
Regulator of microtubule dynamics	Rmdn2	RMD2_MOUSE	47 kDa	4	5	7	0	0	2
EMILIN-1	Emilin1	EMIL1_MOUSE	108 kDa	5	3	5	2	2	2
Adenosylhomocysteinase	Ahcy	SAHH_MOUSE	48 kDa	1	8	8	0	0	2
Desmoglein-2	Dsg2	DSG2_MOUSE	122 kDa	6	3	3	2	3	2
Dimethylaniline monooxygenase [N	Fmo5	FMO5_MOUSE	60 kDa	4	6	6	0	2	2
Sideroflexin-1	Sfxn1	SFXN1_MOUSE	36 kDa	5	5	7	1	1	2
Oligosaccharyltransferase comple	Ostc	OSTC_MOUSE	17 kDa	4	6	6	2	2	2
Basigin	Bsg	BASI_MOUSE	42 kDa	2	4	6	4	4	2
60S ribosomal protein L3	Rpl3	RL3_MOUSE	46 kDa	4	7	5	3	2	2
Dolichyl-diphosphooligosaccharide	Dad1	DAD1_MOUSE	12 kDa	4	7	6	0	5	2
Mitochondrial amidoxime reducing	2-Mar	MARC2_MOUSE	38 kDa	4	9	7	2	2	2
Bile salt export pump	Abcb11	ABCBB_MOUSE	147 kDa	4	8	8	2	2	2
Very-long-chain (3R)-3-hydroxyacy	Hacd3	HACD3_MOUSE	43 kDa	3	6	9	2	4	2
60S ribosomal protein L14	Rpl14	RL14_MOUSE	24 kDa	5	10	5	2	2	2
Keratin, type II cytoskeletal 1	Krt1	K2C1_MOUSE	66 kDa	5	6	10	2	2	2
Sodium/bile acid cotransporter	Slc10a1	NTCP_MOUSE	39 kDa	4	9	8	2	2	2
Elongation factor 1-alpha 1	Eef1a1	EF1A1_MOUSE	50 kDa	4	9	9	2	2	2
Cytochrome c oxidase subunit 7A2	Cox7a2	CX7A2_MOUSE	9 kDa	7	6	9	2	2	2
Sodium-coupled neutral amino aci	Slc38a3	S38A3_MOUSE	56 kDa	5	9	14	0	1	2
Serum paraoxonase/arylesterase 1	Pon1	PON1_MOUSE	40 kDa	6	13	9	2	2	2
Collagen alpha-2(V) chain	Col5a2	CO5A2_MOUSE	145 kDa	12	7	8	1	6	2
Amine oxidase [flavin-containing] B	Maob	AOFB_MOUSE	59 kDa	4	13	20	2	3	2
Mitochondrial glutamate carrier 1	Slc25a22	GHC1_MOUSE	35 kDa	10	10	17	1	4	2
Transmembrane protein 14C	Tmem14c	TM14C_MOUSE	12 kDa	12	12	15	2	2	2

Spectrin beta chain, non-erythrocy	Sptbn1	SPTB2_MOUSE	274 kDa	16	10	15	1	2	2
Voltage-dependent anion-selective	Vdac3	VDAC3_MOUSE	31 kDa	11	17	21	2	1	2
Mitochondrial pyruvate carrier 2	Mpc2	MPC2_MOUSE	14 kDa	16	17	22	0	3	2
NADH dehydrogenase [ubiquinone	Ndufs3	NDUS3_MOUSE	30 kDa	18	17	23	0	4	2
Betaine--homocysteine S-methyltra	Bhmt	BHMT1_MOUSE	45 kDa	9	30	28	3	3	2
ATP-binding cassette sub-family D	Abcd3	ABCD3_MOUSE	75 kDa	18	36	33	2	7	2
Acyl carrier protein, mitochondrial	Ndufab1	ACPM_MOUSE	17 kDa	0	0	0	1	4	1
Calmin	Clmn	CLMN_MOUSE	117 kDa	2	1	1	1	1	1
Sulfide:quinone oxidoreductase, m	Sqrdl	SQRD_MOUSE	50 kDa	0	1	5	0	0	1
Fructose-bisphosphate aldolase B	Aldob	ALDOB_MOUSE	40 kDa	0	4	0	0	2	1
Cytochrome P450 2C54	Cyp2c54	CP254_MOUSE	56 kDa	2	3	4	0	0	1
Acyl-CoA dehydrogenase family m	Acad9	ACAD9_MOUSE	69 kDa	2	3	5	0	0	1
Glycogen [starch] synthase, liver	Gys2	GYS2_MOUSE	81 kDa	3	3	4	0	0	1
Prelamin-A/C	Lmna	LMNA_MOUSE	74 kDa	2	3	3	1	2	1
Keratin, type II cytoskeletal 1b	Krt77	K2C1B_MOUSE	61 kDa	2	2	4	2	2	1
Alpha-mannosidase 2	Man2a1	MA2A1_MOUSE	132 kDa	2	5	5	1	1	1
Vesicle-associated membrane pro	Vapa	VAPA_MOUSE	28 kDa	4	2	5	1	2	1
ATP-dependent RNA helicase DD	Ddx3y	DDX3Y_MOUSE	73 kDa	5	4	5	0	1	1
Solute carrier family 22 member 27	Slc22a27	S22AR_MOUSE	62 kDa	5	2	6	0	2	1
Protein transport protein Sec61 su	Sec61b	SC61B_MOUSE	10 kDa	2	5	6	2	2	1
Hydroxymethylglutaryl-CoA syntha	Hmgcs2	HMCS2_MOUSE	57 kDa	3	8	7	0	1	1
Collagen alpha-1(V) chain	Col5a1	CO5A1_MOUSE	184 kDa	7	5	6	2	3	1
Histone H2A type 1-F	Hist1h2af	H2A1F_MOUSE	14 kDa	4	9	6	2	2	1
Surfeit locus protein 4	Surf4	SURF4_MOUSE	30 kDa	5	8	7	2	2	1
Cytochrome P450 1A2	Cyp1a2	CP1A2_MOUSE	58 kDa	6	10	9	0	0	1
Glyceraldehyde-3-phosphate dehy	Gapdh	G3P_MOUSE	36 kDa	2	11	12	0	1	1
Histone H2B type 1-B	Hist1h2bb	H2B1B_MOUSE	14 kDa	6	10	10	0	1	1
Very long-chain acyl-CoA syntheta	Slc27a2	S27A2_MOUSE	70 kDa	3	14	8	0	2	1
Fatty aldehyde dehydrogenase	Aldh3a2	AL3A2_MOUSE	54 kDa	3	13	10	0	1	1
ATP synthase F(0) complex subun	Atp5f1	AT5F1_MOUSE	29 kDa	6	9	7	3	4	1
Cytochrome P450 2D10	Cyp2d10	CP2DA_MOUSE	57 kDa	9	13	7	0	0	1
NADH-ubiquinone oxidoreductase	Mtnd4	NU4M_MOUSE	52 kDa	7	9	11	0	3	1
NADH dehydrogenase [ubiquinone	Ndufv1	NDUV1_MOUSE	51 kDa	6	7	14	0	3	1
NADH-ubiquinone oxidoreductase	Mtnd1	NU1M_MOUSE	36 kDa	6	10	11	0	4	1
Dimethylaniline monooxygenase [N	Fmo3	FMO3_MOUSE	61 kDa	6	12	13	0	0	1
60S ribosomal protein L18	Rpl18	RL18_MOUSE	22 kDa	8	10	12	1	4	1
Putative helicase MOV-10	Mov10	MOV10_MOUSE	114 kDa	15	11	15	0	0	1
Long-chain-fatty-acid--CoA ligase 5	Acsl5	ACSL5_MOUSE	76 kDa	7	22	15	0	0	1
Pyruvate carboxylase, mitochondri	Pc	PYC_MOUSE	130 kDa	10	22	16	0	1	1
Voltage-dependent anion-selective	Vdac2	VDAC2_MOUSE	32 kDa	16	21	19	2	1	1
Cytochrome P450 2D26	Cyp2d26	CP2DQ_MOUSE	57 kDa	12	33	16	2	0	1
Vimentin	Vim	VIME_MOUSE	54 kDa	24	25	20	5	5	1
Cytochrome b-c1 complex subunit	Uqcrc2	QCR2_MOUSE	48 kDa	27	33	50	2	2	1
Collagen alpha-1(XII) chain	Col12a1	COCA1_MOUSE	340 kDa	1	0	0	0	0	0
Trimeric intracellular cation channe	Tmem38a	TM38A_MOUSE	33 kDa	0	1	0	0	0	0
Myozenin-1	Myoz1	MYOZ1_MOUSE	31 kDa	0	1	0	0	0	0
Integrin beta-1	Itgb1	ITB1_MOUSE	88 kDa	0	1	0	0	0	0
Glycogen [starch] synthase, muscl	Gys1	GYS1_MOUSE	84 kDa	0	1	0	0	0	0
Keratin, type II cuticular 87	Krt87	KRT87_MOUSE	55 kDa	0	0	2	0	0	0
Ryanodine receptor 1	Ryr1	RYR1_MOUSE	565 kDa	1	1	0	0	0	0
Keratin, type I cytoskeletal 16	Krt16	K1C16_MOUSE	52 kDa	0	0	0	0	2	0
Decorin	Dcn	PGS2_MOUSE	40 kDa	2	0	0	0	0	0
Afadin	Afdn	AFAD_MOUSE	207 kDa	2	0	0	0	0	0
von Willebrand factor A domain-co	Vwa8	VWA8_MOUSE	213 kDa	0	0	2	0	0	0
LIM domain-binding protein 3	Ldb3	LDB3_MOUSE	76 kDa	0	2	0	0	0	0
60 kDa heat shock protein, mitoch	Hspd1	CH60_MOUSE	61 kDa	0	2	0	0	0	0
Interferon-inducible GTPase 1	Iigp1	IIGP1_MOUSE	48 kDa	0	2	0	0	0	0
Periostin	Postn	POSTN_MOUSE	93 kDa	2	0	1	0	0	0
Keratin, type II cytoskeletal 6A	Krt6a	K2C6A_MOUSE	59 kDa	0	0	0	0	3	0
Aminopeptidase N	Anpep	AMPN_MOUSE	110 kDa	0	1	2	0	0	0
Liver carboxylesterase 1	Ces1	EST1_MOUSE	63 kDa	0	3	0	0	0	0
Selenium-binding protein 2	Selenbp2	SBP2_MOUSE	53 kDa	0	1	2	0	0	0
Aldehyde dehydrogenase, cytosoli	Aldh1a7	AL1A7_MOUSE	55 kDa	0	0	3	0	0	0
Carboxylesterase 1F	Ces1f	CES1F_MOUSE	62 kDa	0	2	1	0	0	0
3 beta-hydroxysteroid dehydrogen	Hsd3b3	3BHS3_MOUSE	42 kDa	0	3	0	0	0	0
Small nuclear ribonucleoprotein Sr	Snrpd3	SMD3_MOUSE	14 kDa	0	2	1	0	0	0
Mitochondrial fission process prote	Mtfp1	MTFP1_MOUSE	18 kDa	0	0	3	0	0	0
Obscurin	Obscn	OBSCN_MOUSE	966 kDa	2	2	0	0	0	0

Cytoplasmic dynein 1 heavy chain	Dync1h1	DYHC1_MOUSE	532 kDa	1	2	1	0	0	0
Peroxisomal acyl-coenzyme A oxid	Acox2	ACOX2_MOUSE	77 kDa	0	3	1	0	0	0
Estradiol 17 beta-dehydrogenase 5	Akr1c6	DHB5_MOUSE	37 kDa	0	2	2	0	0	0
Metalloreductase STEAP4	Steap4	STEA4_MOUSE	53 kDa	1	0	3	0	0	0
Collagen alpha-1(VIII) chain	Col8a1	CO8A1_MOUSE	74 kDa	2	3	0	0	0	0
Heterogeneous nuclear ribonucleo	Hnrnpm	HNRPM_MOUSE	78 kDa	0	2	3	0	0	0
Kelch-like protein 41	Klhl41	KLH41_MOUSE	68 kDa	1	2	2	0	0	0
Ribosome-binding protein 1	Rrbp1	RRBP1_MOUSE	173 kDa	0	0	4	0	1	0
Pregnancy zone protein	Pzp	PZP_MOUSE	166 kDa	1	2	2	0	0	0
Very long-chain specific acyl-CoA	Acadvl	ACADV_MOUSE	71 kDa	0	4	1	0	0	0
Canalicular multispecific organic a	Abcc2	MRP2_MOUSE	174 kDa	0	3	2	0	0	0
Hydroxymethylglutaryl-CoA lyase,	Hmgcl	HMGCL_MOUSE	34 kDa	0	3	2	0	0	0
1,4-alpha-glucan-branching enzym	Gbe1	GLGB_MOUSE	80 kDa	0	2	3	0	0	0
40S ribosomal protein S6	Rps6	RS6_MOUSE	29 kDa	0	4	1	0	0	0
Dimethylglycine dehydrogenase, m	Dmgdh	M2GD_MOUSE	97 kDa	0	2	3	0	0	0
Redox-regulatory protein FAM213A	Fam213a	F213A_MOUSE	24 kDa	0	3	2	0	0	0
Regucalcin	Rgn	RGN_MOUSE	33 kDa	1	2	2	0	0	0
Cystathionine gamma-lyase	Cth	CGL_MOUSE	44 kDa	0	3	2	0	0	0
GTP-binding protein SAR1b	Sar1b	SAR1B_MOUSE	22 kDa	0	2	3	0	0	0
Ornithine carbamoyltransferase, m	Otc	OTC_MOUSE	40 kDa	0	3	2	0	0	0
Laminin subunit alpha-5	Lama5	LAMA5_MOUSE	404 kDa	2	2	2	0	0	0
Laminin subunit beta-2	Lamb2	LAMB2_MOUSE	197 kDa	2	2	2	0	0	0
Caveolin-1	Cav1	CAV1_MOUSE	21 kDa	1	2	3	0	0	0
Bifunctional epoxide hydrolase 2	Ephx2	HYES_MOUSE	63 kDa	0	4	2	0	0	0
Phosphatidylinositol-binding clathri	Picalm	PICAL_MOUSE	72 kDa	1	2	3	0	0	0
Alpha-1-antitrypsin 1-4	Serpina1d	A1AT4_MOUSE	46 kDa	2	2	2	0	0	0
NADH dehydrogenase [ubiquinone	Ndufb8	NDUB8_MOUSE	22 kDa	2	2	2	0	0	0
Probable ATP-dependent RNA hel	Ddx17	DDX17_MOUSE	72 kDa	1	2	3	0	0	0
Acyl-coenzyme A synthetase ACS	Acsm1	ACSM1_MOUSE	65 kDa	0	4	2	0	0	0
Nodal modulator 1	Nomo1	NOMO1_MOUSE	133 kDa	1	1	4	0	0	0
Mitochondrial import receptor subu	Tomm70	TOM70_MOUSE	68 kDa	0	0	4	0	2	0
2-hydroxyacyl-CoA lyase 1	Hacl1	HACL1_MOUSE	64 kDa	0	3	3	0	0	0
D-beta-hydroxybutyrate dehydroge	Bdh1	BDH_MOUSE	38 kDa	0	2	4	0	0	0
Cytochrome b-c1 complex subunit	Uqcrq	QCR8_MOUSE	10 kDa	0	2	4	0	0	0
Erythrocyte band 7 integral membr	Stom	STOM_MOUSE	31 kDa	1	2	3	0	0	0
Aspartate aminotransferase, mitoc	Got2	AATM_MOUSE	47 kDa	0	4	2	0	0	0
Arylacetamide deacetylase	Aadac	AAAD_MOUSE	45 kDa	0	5	1	0	0	0
17-beta-hydroxysteroid dehydroge	Hsd17b6	H17B6_MOUSE	36 kDa	0	4	2	0	0	0
Farnesyl pyrophosphate synthase	Fdps	FPPS_MOUSE	41 kDa	2	3	1	0	0	0
60S ribosomal protein L27	Rpl27	RL27_MOUSE	16 kDa	3	3	0	0	0	0
Ras GTPase-activating-like protein	Iqgap2	IQGA2_MOUSE	181 kDa	3	3	1	0	0	0
Collagen alpha-5(VI) chain	Col6a5	CO6A5_MOUSE	290 kDa	2	3	2	0	0	0
Tight junction protein ZO-1	Tjp1	ZO1_MOUSE	195 kDa	3	2	2	0	0	0
Fumarylacetoacetase	Fah	FAAA_MOUSE	46 kDa	0	4	3	0	0	0
Succinate dehydrogenase [ubiquin	Sdhb	SDHB_MOUSE	32 kDa	2	3	2	0	0	0
Heterogeneous nuclear ribonucleo	Hnrnph1	HNRH1_MOUSE	49 kDa	3	4	0	0	0	0
Coatomer subunit gamma-1	Copg1	COPG1_MOUSE	98 kDa	3	2	2	0	0	0
40S ribosomal protein S16	Rps16	RS16_MOUSE	16 kDa	1	4	2	0	0	0
Ankyrin-1	Ank1	ANK1_MOUSE	204 kDa	2	1	4	0	1	0
Lamina-associated polypeptide 2,	Tmpo	LAP2B_MOUSE	50 kDa	4	1	3	0	0	0
Steroid 17-alpha-hydroxylase/17,2	Cyp17a1	CP17A_MOUSE	58 kDa	3	3	2	0	0	0
Sodium/potassium-transporting AT	Atp1b1	AT1B1_MOUSE	35 kDa	3	2	3	0	0	0
Argininosuccinate lyase	Asl	ARLY_MOUSE	52 kDa	0	6	2	0	0	0
Urocanate hydratase	Uroc1	HUTU_MOUSE	75 kDa	2	4	2	0	0	0
Flotillin-2	Flot2	FLOT2_MOUSE	47 kDa	3	3	2	0	0	0
C-1-tetrahydrofolate synthase, cyt	Mthfd1	C1TC_MOUSE	101 kDa	0	5	3	0	0	0
Ras-related protein Rab-1A	Rab1A	RAB1A_MOUSE	23 kDa	0	4	4	0	0	0
40S ribosomal protein S9	Rps9	RS9_MOUSE	23 kDa	0	4	4	0	0	0
Vinculin	Vcl	VINC_MOUSE	117 kDa	3	1	4	1	0	0
Carnitine O-palmitoyltransferase 1	Cpt1b	CPT1B_MOUSE	88 kDa	2	5	2	0	0	0
14-3-3 protein sigma	Sfn	1433S_MOUSE	28 kDa	1	4	4	0	0	0
Sodium/potassium-transporting AT	Atp1a2	AT1A2_MOUSE	112 kDa	1	4	4	0	0	0
Solute carrier organic anion transp	Slco1a6	SO1A6_MOUSE	74 kDa	1	4	4	0	0	0
Cytochrome b-c1 complex subunit	Uqcrfs1	UCRI_MOUSE	29 kDa	2	2	3	0	2	0
Leukotriene-B4 omega-hydroxylas	Cyp4f14	CP4FE_MOUSE	60 kDa	1	4	4	0	0	0
Monocarboxylate transporter 1	Slc16a1	MOT1_MOUSE	53 kDa	2	4	3	0	0	0
Vesicle-trafficking protein SEC22b	Sec22b	SC22B_MOUSE	25 kDa	2	2	4	0	1	0
Mitochondrial import inner membra	Timm50	TIM50_MOUSE	40 kDa	1	4	4	0	0	0

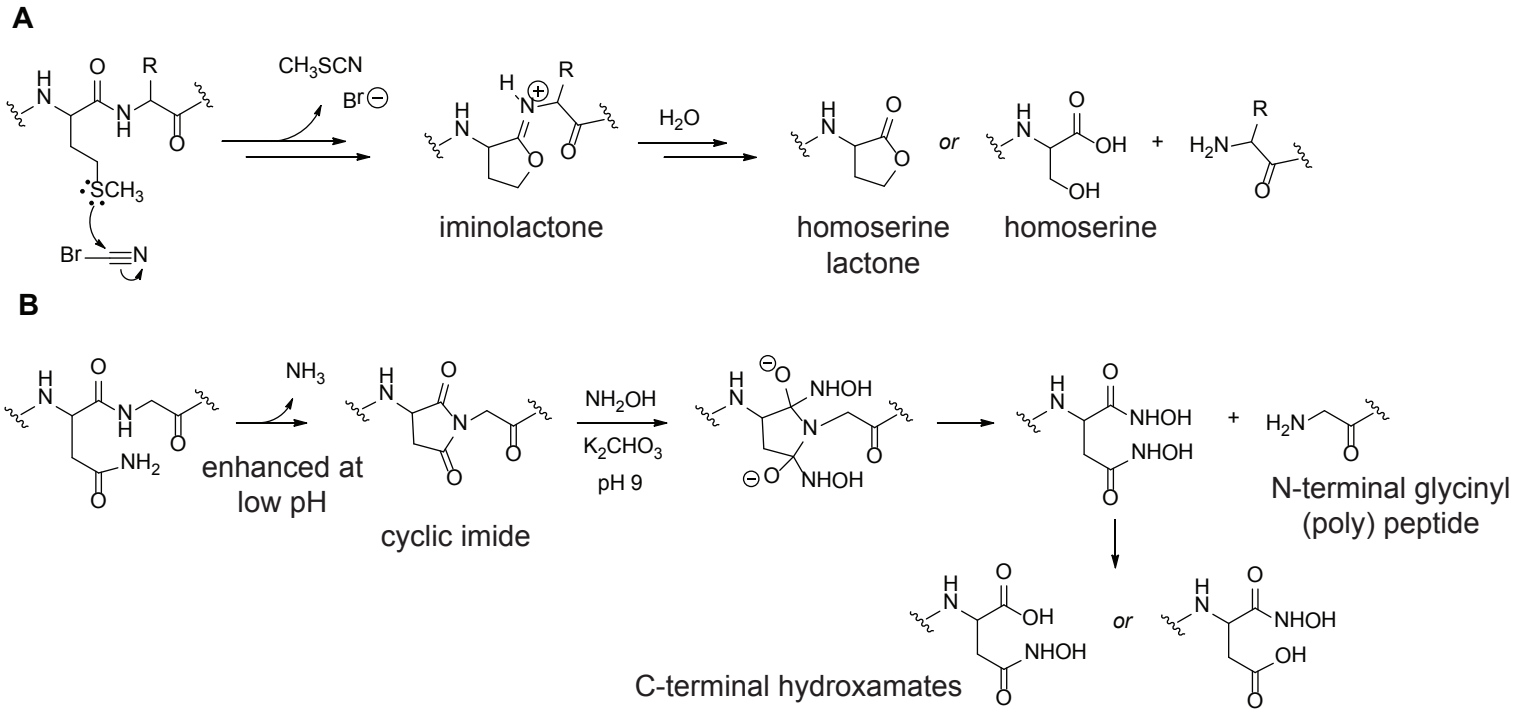
Glutamate dehydrogenase 1, mito	Glud1	DHE3_MOUSE	61 kDa	0	5	4	0	0	0
NADH dehydrogenase [ubiquinone	Ndufb10	NDUBA_MOUSE	21 kDa	1	4	4	0	0	0
Myosin-11	Myh11	MYH11_MOUSE	227 kDa	3	3	4	0	0	0
Myosin regulatory light chain 2, sk	Mylpf	MLRS_MOUSE	19 kDa	1	5	4	0	0	0
Splicing factor, proline- and glutam	Sfpq	SFPQ_MOUSE	75 kDa	2	4	4	0	0	0
Platelet glycoprotein 4	Cd36	CD36_MOUSE	53 kDa	0	6	4	0	0	0
Transforming growth factor-beta-in	Tgfbi	BGH3_MOUSE	75 kDa	6	1	3	0	0	0
Stress-70 protein, mitochondrial	Hspa9	GRP75_MOUSE	73 kDa	0	6	4	0	0	0
Annexin A7	Anxa7	ANXA7_MOUSE	50 kDa	2	3	5	0	0	0
Malectin	Mlec	MLEC_MOUSE	32 kDa	2	3	3	0	2	0
Fatty acid desaturase 2	Fads2	FADS2_MOUSE	52 kDa	1	3	6	0	0	0
Sorbitol dehydrogenase	Sord	DHSO_MOUSE	38 kDa	1	5	4	0	0	0
Succinate dehydrogenase [ubiquin	Sdha	SDHA_MOUSE	73 kDa	2	3	5	0	0	0
Fatty-acid amide hydrolase 1	Faah	FAAH1_MOUSE	63 kDa	1	5	4	0	0	0
Receptor expression-enhancing pr	Reep6	REEP6_MOUSE	22 kDa	2	6	2	0	0	0
Myomesin-1	Myom1	MYOM1_MOUSE	185 kDa	3	3	5	0	0	0
Epidermal growth factor receptor	Egfr	EGFR_MOUSE	135 kDa	3	4	4	0	0	0
Multidrug resistance-associated pr	Abcc6	MRP6_MOUSE	165 kDa	3	3	5	0	0	0
40S ribosomal protein S11	Rps11	RS11_MOUSE	18 kDa	3	4	4	0	0	0
Protein disulfide-isomerase	P4hb	PDIA1_MOUSE	57 kDa	1	8	2	0	0	0
Malonyl-CoA decarboxylase, mito	Mlycd	DCMC_MOUSE	55 kDa	3	3	5	0	0	0
Carboxylesterase 3A	Ces3a	EST3A_MOUSE	63 kDa	0	7	4	0	0	0
Serine--pyruvate aminotransferase	Agxt	SPYA_MOUSE	46 kDa	1	5	5	0	0	0
CDGSH iron-sulfur domain-contair	Cisd1	CISD1_MOUSE	12 kDa	0	4	6	0	1	0
Laminin subunit gamma-1	Lamc1	LAMC1_MOUSE	177 kDa	3	4	4	0	1	0
Cartilage intermediate layer protei	Cilp2	CILP2_MOUSE	126 kDa	9	2	1	0	0	0
Asialoglycoprotein receptor 1	Asgr1	ASGR1_MOUSE	33 kDa	0	5	7	0	0	0
Elongation factor 2	Eef2	EF2_MOUSE	95 kDa	1	6	4	0	1	0
Complement C3	C3	CO3_MOUSE	186 kDa	2	6	4	0	0	0
AP-2 complex subunit alpha-2	Ap2a2	AP2A2_MOUSE	104 kDa	0	7	5	0	0	0
Protein-glutamine gamma-glutamy	Tgm1	TGM1_MOUSE	90 kDa	2	6	4	0	0	0
Sulfotransferase 1A1	Sult1a1	ST1A1_MOUSE	34 kDa	2	4	6	0	0	0
Peroxisomal acyl-coenzyme A oxi	Acox1	ACOX1_MOUSE	75 kDa	0	6	6	0	0	0
NADH dehydrogenase [ubiquinone	Ndufa10	NDUAA_MOUSE	41 kDa	1	4	6	0	1	0
78 kDa glucose-regulated protein	Hspa5	GRP78_MOUSE	72 kDa	1	7	4	0	0	0
Metaxin-2	Mtx2	MTX2_MOUSE	30 kDa	5	3	4	0	0	0
Myelin protein P0	Mpz	MYP0_MOUSE	28 kDa	1	5	3	0	4	0
Fibulin-5	Fbln5	FBLN5_MOUSE	50 kDa	4	4	5	0	0	0
Lumican	Lum	LUM_MOUSE	38 kDa	6	4	3	0	0	0
AP-2 complex subunit beta	Ap2b1	AP2B1_MOUSE	105 kDa	3	5	5	0	0	0
S-adenosylmethionine synthase is	Mat1a	METK1_MOUSE	44 kDa	1	3	9	0	0	0
NADH dehydrogenase [ubiquinone	Ndufa13	NDUAD_MOUSE	17 kDa	3	4	4	0	2	0
Sarcosine dehydrogenase, mitoch	Sardh	SARDH_MOUSE	102 kDa	0	7	6	0	0	0
Peroxisomal bifunctional enzyme	Ehhadh	ECHP_MOUSE	78 kDa	2	4	7	0	0	0
60S ribosomal protein L18a	Rpl18a	RL18A_MOUSE	21 kDa	3	4	4	1	1	0
Signal peptidase complex catalytic	Sec11a	SC11A_MOUSE	21 kDa	4	4	5	0	0	0
Poly(rC)-binding protein 1	Pcbp1	PCBP1_MOUSE	37 kDa	4	5	5	0	0	0
40S ribosomal protein S13	Rps13	RS13_MOUSE	17 kDa	2	5	7	0	0	0
Spectrin alpha chain, non-erythroc	Sptan1	SPTN1_MOUSE	285 kDa	4	4	7	0	0	0
NADH-ubiquinone oxidoreductase	Mtnd5	NU5M_MOUSE	68 kDa	3	6	5	0	1	0
ATP-dependent RNA helicase A	Dhx9	DHX9_MOUSE	149 kDa	5	6	3	0	2	0
Phospholipid-transporting ATPase	Atp11c	AT11C_MOUSE	129 kDa	5	6	5	0	0	0
NADH dehydrogenase [ubiquinone	Ndufa8	NDUA8_MOUSE	20 kDa	3	6	7	0	0	0
Translocon-associated protein sub	Ssr1	SSRA_MOUSE	32 kDa	4	4	8	0	0	0
Glycogen phosphorylase, liver forn	Pygl	PYGL_MOUSE	97 kDa	1	8	8	0	0	0
Cytochrome P450 3A13	Cyp3a13	CP3AD_MOUSE	57 kDa	4	8	5	0	0	0
60S ribosomal protein L7	Rpl7	RL7_MOUSE	31 kDa	2	5	5	4	1	0
Collagen alpha-1(XIV) chain	Col14a1	COEA1_MOUSE	193 kDa	3	4	4	4	3	0
ATP synthase subunit a	Mtatp6	ATP6_MOUSE	25 kDa	5	7	6	0	0	0
Collagen alpha-6(VI) chain	Col6a6	CO6A6_MOUSE	246 kDa	7	6	5	0	0	0
Solute carrier family 22 member 1	Slc22a1	S22A1_MOUSE	62 kDa	4	6	6	0	2	0
Transmembrane emp24 domain-c	Tmed10	TMEDA_MOUSE	25 kDa	4	4	8	1	2	0
Tubulin beta-3 chain	Tubb3	TBB3_MOUSE	50 kDa	4	6	8	0	2	0
Fatty acid-binding protein, liver	Fabp1	FABPL_MOUSE	14 kDa	4	8	8	0	0	0
40S ribosomal protein S3	Rps3	RS3_MOUSE	27 kDa	5	5	10	0	0	0
Phenylalanine-4-hydroxylase	Pah	PH4H_MOUSE	52 kDa	6	7	8	0	0	0
Peroxiredoxin-1	Prdx1	PRDX1_MOUSE	22 kDa	1	10	11	0	0	0
Cytochrome c oxidase subunit 5A,	Cox5a	COX5A_MOUSE	16 kDa	3	9	10	0	0	0

Microsomal triglyceride transfer pr	Mttp	MTP_MOUSE	99 kDa	1	14	7	0	0	0
40S ribosomal protein SA	Rpsa	RSSA_MOUSE	33 kDa	4	9	9	0	0	0
Catalase	Cat	CATA_MOUSE	60 kDa	0	14	9	0	0	0
Fructose-1,6-bisphosphatase 1	Fbp1	F16P1_MOUSE	37 kDa	0	12	11	0	0	0
Cytochrome c oxidase subunit NDU	Ndufa4	NDUA4_MOUSE	9 kDa	3	8	8	2	2	0
Dihydrolipoyllysine-residue acetyltr	Dlat	ODP2_MOUSE	68 kDa	3	11	9	0	1	0
60S ribosomal protein L13	Rpl13	RL13_MOUSE	24 kDa	9	10	5	0	0	0
Cytochrome P450 2E1	Cyp2e1	CP2E1_MOUSE	57 kDa	4	13	7	0	0	0
ATP synthase subunit f, mitochond	Atp5j2	ATPK_MOUSE	10 kDa	8	8	6	0	2	0
L-lactate dehydrogenase A chain	Ldha	LDHA_MOUSE	36 kDa	2	12	10	0	0	0
Carboxylesterase 1D	Ces1d	CES1D_MOUSE	62 kDa	0	16	8	0	0	0
60S ribosomal protein L8	Rpl8	RL8_MOUSE	28 kDa	6	9	9	0	0	0
Desmin	Des	DESM_MOUSE	53 kDa	5	12	10	0	0	0
Cytochrome P450 2A4	Cyp2a4	CP2A4_MOUSE	57 kDa	6	12	9	0	0	0
Talin-1	Tln1	TLN1_MOUSE	270 kDa	8	8	12	0	1	0
Cytochrome P450 3A41	Cyp3a41a	CP341_MOUSE	58 kDa	6	20	5	0	0	0
Myosin-14	Myh14	MYH14_MOUSE	229 kDa	11	9	12	0	0	0
NADPH--cytochrome P450 reducta	Por	NCPR_MOUSE	77 kDa	4	15	11	0	2	0
Protein transport protein Sec24A	Sec24a	SC24A_MOUSE	119 kDa	10	8	13	0	1	0
Serum albumin	Alb	ALBU_MOUSE	69 kDa	4	17	14	0	0	0
60S ribosomal protein L6	Rpl6	RL6_MOUSE	34 kDa	9	12	12	2	1	0
Retinal dehydrogenase 1	Aldh1a1	AL1A1_MOUSE	54 kDa	2	19	15	0	0	0
Fibrinogen beta chain	Fgb	FIBB_MOUSE	55 kDa	20	10	7	0	0	0
Tubulin alpha-4A chain	Tuba4a	TBA4A_MOUSE	50 kDa	10	12	12	1	2	0
ATP synthase subunit O, mitochon	Atp5o	ATPO_MOUSE	23 kDa	9	14	14	0	0	0
Epoxide hydrolase 1	Ephx1	HYEP_MOUSE	53 kDa	9	15	13	0	2	0
Filamin-C	Flnc	FLNC_MOUSE	291 kDa	8	17	18	0	3	0
Aldehyde dehydrogenase, mitocho	Aldh2	ALDH2_MOUSE	57 kDa	3	28	18	0	0	0
Myosin light chain 1/3, skeletal mu	Myl1	MYL1_MOUSE	21 kDa	10	28	12	0	0	0
Calcium-binding mitochondrial car	Slc25a12	CMC1_MOUSE	75 kDa	13	22	16	0	1	0
Sodium/potassium-transporting AT	Atp1a1	AT1A1_MOUSE	113 kDa	16	17	15	0	5	0
Thioredoxin-dependent peroxide re	Prdx3	PRDX3_MOUSE	28 kDa	20	17	17	0	0	0
Heat shock cognate 71 kDa protei	Hspa8	HSP7C_MOUSE	71 kDa	12	28	23	0	0	0
Triokinase/FMN cyclase	Tkfc	TKFC_MOUSE	60 kDa	14	28	22	0	1	0
Catenin alpha-1	Ctnna1	CTNA1_MOUSE	100 kDa	27	17	22	1	0	0
Myosin-8	Myh8	MYH8_MOUSE	223 kDa	22	26	24	0	1	0
Fibrillin-1	Fbn1	FBN1_MOUSE	312 kDa	24	21	30	0	0	0
ATP synthase subunit beta, mitoch	Atp5b	ATPB_MOUSE	56 kDa	15	43	60	0	0	0
Basement membrane-specific hep	Hspg2	PGBM_MOUSE	398 kDa	43	30	47	1	3	0
Myosin-7	Myh7	MYH7_MOUSE	223 kDa	27	60	59	0	4	0

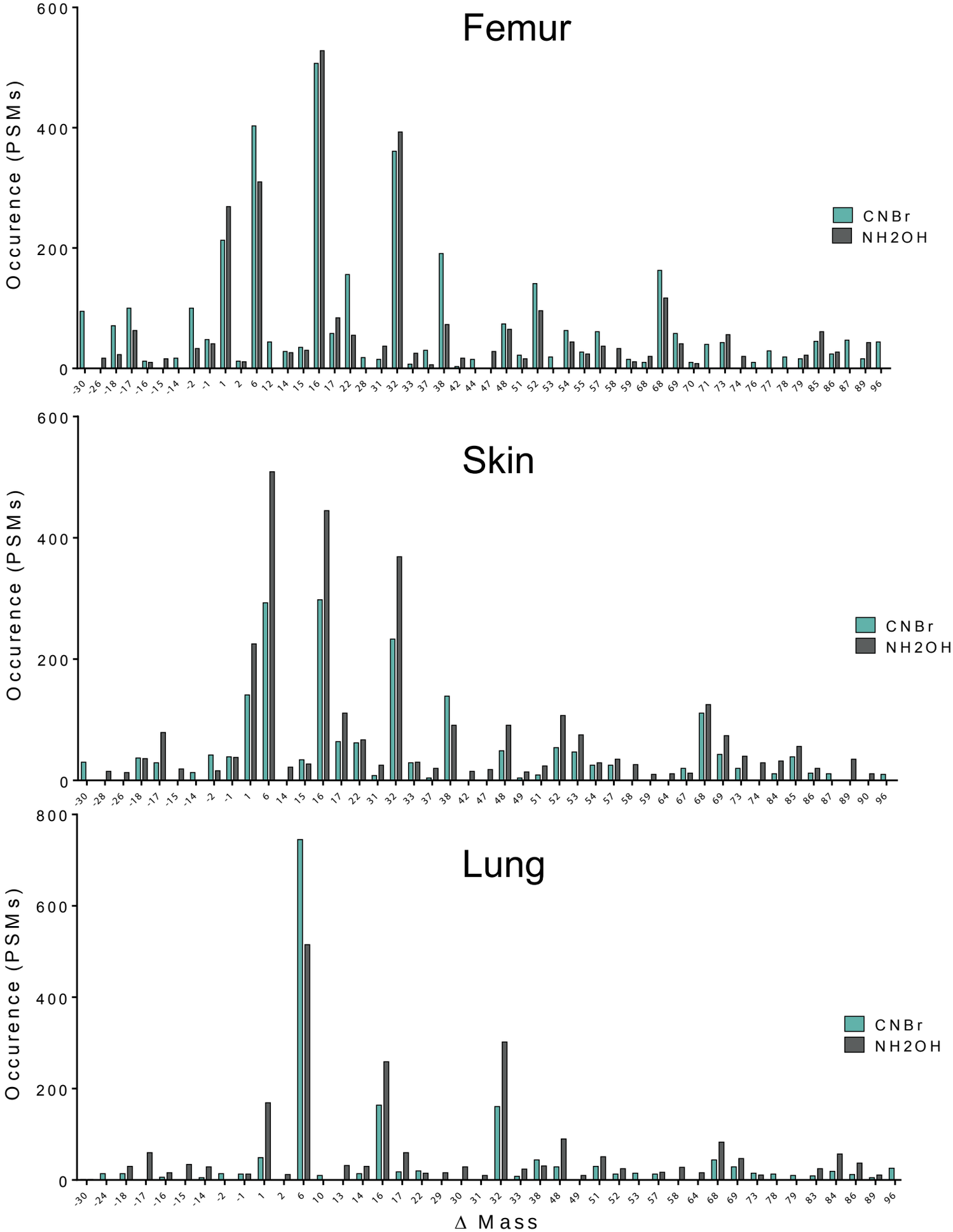
Supplementary Table S5 - Total protein and peptide IDs from data-dependent LC-MS/MS data

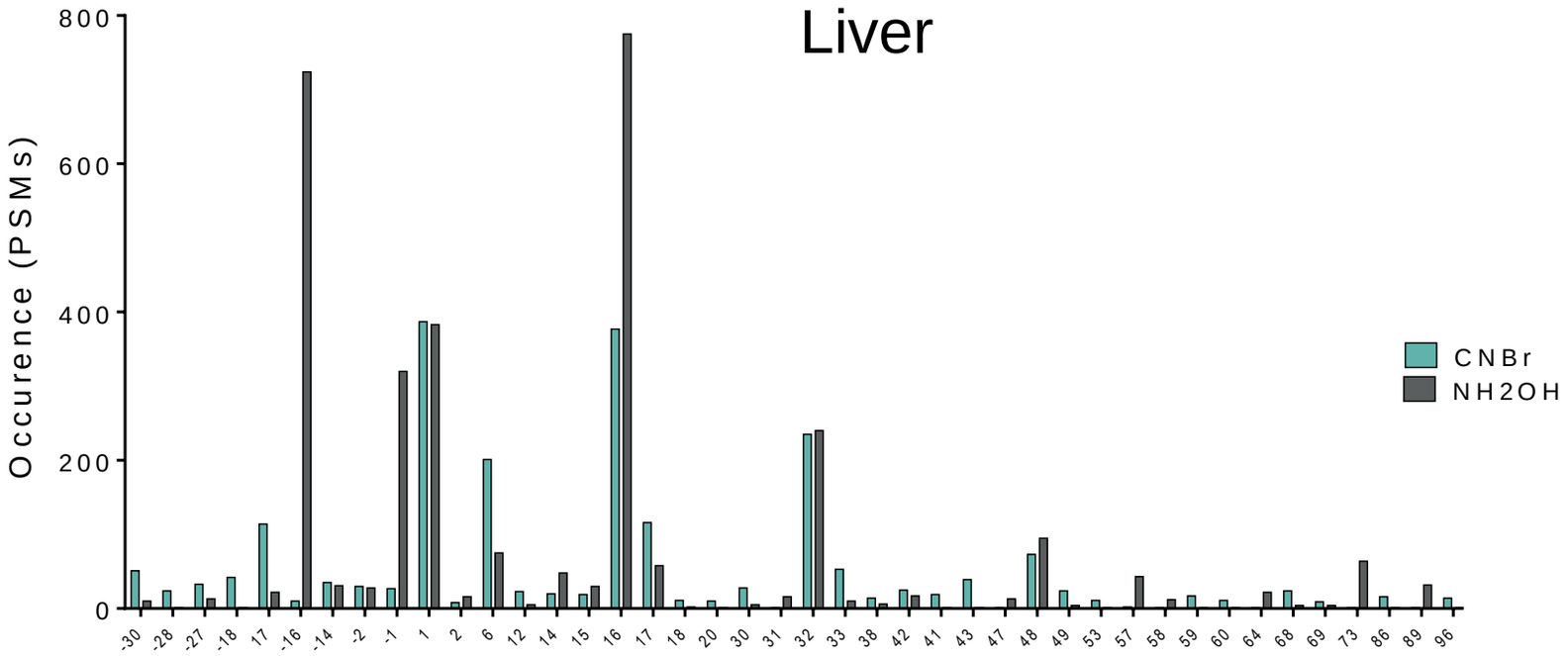
Tissue	DDA LC-MS/MS Metric	CNBr Specific	Shared	NH_2OH Specific
Bone	*Total Protein IDs*	6	97	2
	Total Unique Peptides	287	633	962
Skin	*Total Protein IDs*	66	225	79
	Total Unique Peptides	280	557	767
Lung	*Total Protein IDs*	86	221	84
	Total Unique Peptides	89	326	1051
Muscle	*Total Protein IDs*	77	213	63
	Total Unique Peptides	675	1201	790
Liver	*Total Protein IDs*	80	380	28
	Total Unique Peptides	2119	796	377
Average Total Protein IDs		**63**	**227**	**51**
Average Total Peptide IDs		**690**	**703**	**789**

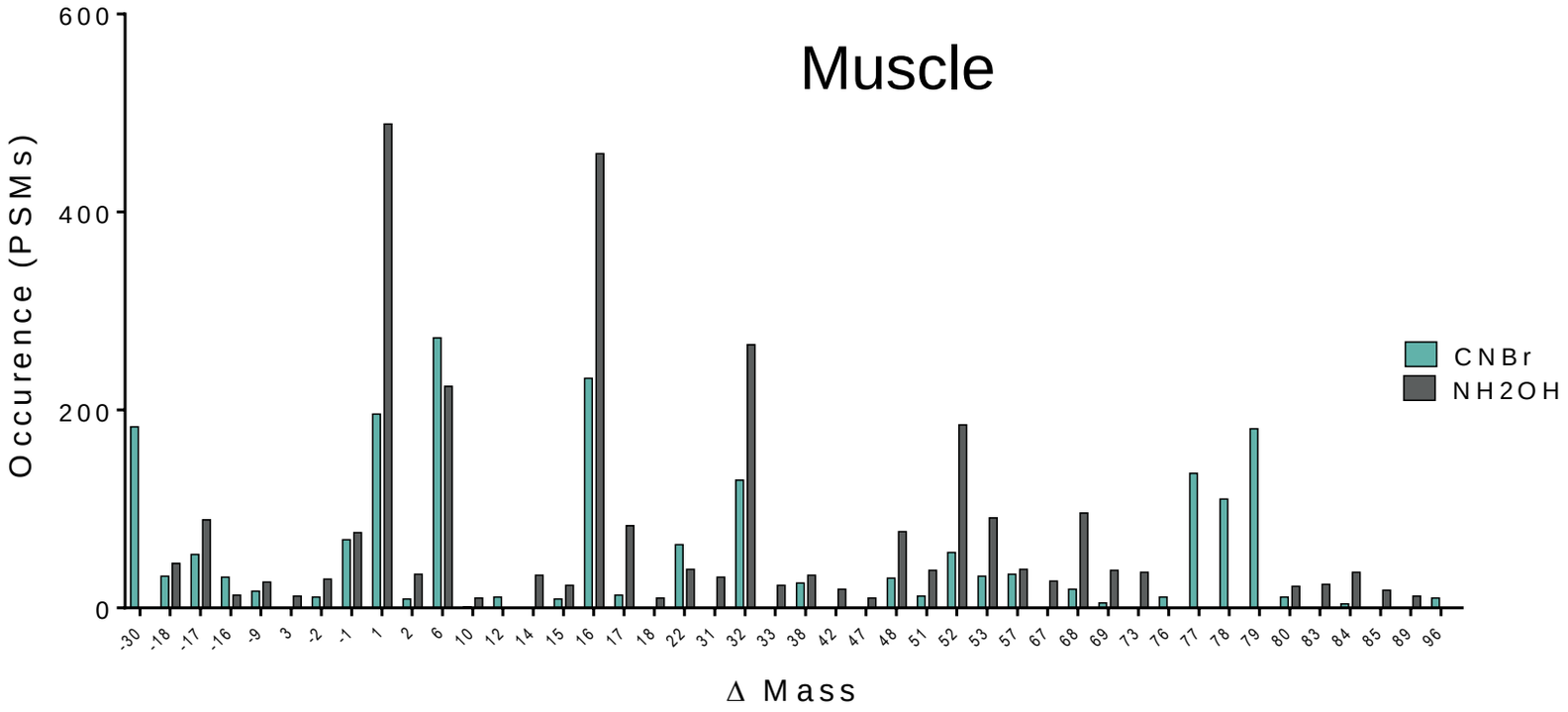
Supplementary Figure S1 - CNBr and NH_2OH reaction mechanisms



Supplementary Figure S2 - Error tolerant search results




Liver
Occurence (PSMs)
800
600
400
200
0
CNBr
NH2OH
-30 -28 -27 -18 17 -16 -14 -2 -1 1 2 6 12 14 15 16 17 18 20 30 31 32 33 38 42 41 43 47 48 49 53 57 58 59 60 64 68 69 73 86 89 96


Muscle
Occurence (PSMs)
600
400
200
0
CNBr
NH2OH
-30 -18 -17 -16 -9 3 -2 -1 1 2 6 10 12 14 15 16 17 18 22 31 32 33 38 42 47 48 51 52 53 57 67 68 69 73 76 77 78 79 80 83 84 85 89 96
Δ Mass