

# RI NSF/EPSCoR Proteomics Facility

## Mass Spectrometry Report

### Protein Groups and Peptide-Spectrum Matches (PSMs)

Sample: Ctr  
Researcher: Djuro Josic  
Data collected: 24 Aug 2011  
Results filtering: Unique PSMs; MOWSE Score > 20.6

MS data file: Ctr\_082511\_224859.raw  
Instrument type: ESI-FTICR  
Search engine: Mascot  
Parameter file: N/D  
Search database: N/D (269577 entries)  
Enzyme specificity: Trypsin (2 missed cleavages allowed)  
MS mass tolerance: 20 ppm; MS/MS tolerance 0.5 Da  
Fixed modifications: Carbamidomethyl (C)  
Var. modifications: [1] Oxidation (M)  
Number of spectra: 3176  
Input PSMs: 124 'Target'; 3 'Decoy'; 2.4% FDR  
Output PSMs: 124

<b>UniProt Human Protein IDs</b>							
<i>Gr p Nr.</i>	<i>Accessio n Number</i>	<i>Protein Name</i>	<i>Prote in Scor e</i>	<i>Uniqu e PSMs</i>	<i>PSM Serial Nrs.</i>	<i>Oth er Grp.</i>	<i>% Seq. Cove r.</i>

1	Q53H26	Transferrin variant (Fragment) OS=Homo sapiens PE=2 SV=1	2321.40	50	4 5 6 12 13 17 20 21 24 26 27 31 33 36 37 38 41 44 46 48 49 53 55 56 57 58 60 62 64 69 72 73 75 79 80 81 84 86 87 91 92 96 98 103 104 111 114 118 122 123		56.6
2	P02768	Serum albumin OS=Homo sapiens GN=ALB PE=1 SV=2	293.28	6	8 10 23 39 45 109		13.4
	H0YA55	Serum albumin (Fragment) OS=Homo sapiens GN=ALB PE=4 SV=1	293.28	6	8 10 23 39 45 109		13.4
	F6KPG5	Albumin (Fragment) OS=Homo sapiens PE=2 SV=1	293.28	6	8 10 23 39 45 109		13.4
	B4DPR2	cDNA FLJ50830, highly similar to Serum albumin OS=Homo sapiens PE=2 SV=1	293.28	6	8 10 23 39 45 109		13.4
	B4DPP6	cDNA FLJ54371, highly similar to Serum albumin OS=Homo sapiens PE=2 SV=1	293.28	6	8 10 23 39 45 109		13.4
	B2RBS8	cDNA, FLJ95666, highly similar to Homo sapiens albumin (ALB), mRNA OS=Homo sapiens PE=2 SV=1	293.28	6	8 10 23 39 45 109		13.4
	A8K9P0	cDNA FLJ78413, highly similar to Homo sapiens albumin, mRNA OS=Homo sapiens PE=2 SV=1	293.28	6	8 10 23 39 45 109		13.4
3	P68133	Actin, alpha skeletal muscle OS=Homo sapiens GN=ACTA1 PE=1 SV=1	267.11	5	1 28 61 102 119		15.7
	P68032	Actin, alpha cardiac muscle 1 OS=Homo sapiens GN=ACTC1 PE=1 SV=1	267.11	5	1 28 61 102 119		15.7
	B7Z6P1	cDNA FLJ53662, highly similar to Actin, alpha skeletal muscle OS=Homo sapiens PE=2 SV=1	267.11	5	1 28 61 102 119		15.7
	A8K3K1	cDNA FLJ78096, highly similar to Homo sapiens actin, alpha, cardiac muscle (ACTC), mRNA OS=Homo sapiens PE=2 SV=1	267.11	5	1 28 61 102 119		15.7
4	Q8TCG3	TPMsk3 (Fragment) OS=Homo sapiens GN=TPM3 PE=2 SV=1	224.73	4	16 51 65 110		27.4
	Q5VU72	Tropomyosin 3, isoform CRA_a OS=Homo sapiens GN=TPM3 PE=3 SV=1	224.73	4	16 51 65 110		27.4
	Q5VU66	Tropomyosin alpha-3 chain OS=Homo sapiens GN=TPM3 PE=4 SV=1	224.73	4	16 51 65 110		27.4
	Q5VU59	Tropomyosin alpha-3 chain OS=Homo sapiens GN=TPM3 PE=3 SV=1	224.73	4	16 51 65 110		27.4
	Q5VU58	Tropomyosin 3, isoform CRA_b OS=Homo sapiens GN=TPM3 PE=3 SV=1	224.73	4	16 51 65 110		27.4
	Q5HYB6	Putative uncharacterized protein DKFZp686J1372 OS=Homo sapiens GN=DKFZp686J1372 PE=2 SV=1	224.73	4	16 51 65 110		27.4
	B2RDE1	cDNA, FLJ96568, highly similar to Homo sapiens tropomyosin 3 (TPM3), mRNA OS=Homo sapiens PE=2 SV=1	224.73	4	16 51 65 110		27.4
5	Q6ZN40	Tropomyosin 1 (Alpha), isoform CRA_f OS=Homo sapiens GN=TPM1 PE=2 SV=1	202.67	7	19 42 54 63 99 105 120		32.2

6	P69905	Hemoglobin subunit alpha OS=Homo sapiens GN=HBA1 PE=1 SV=2	141.29	4	30 85 100 108		36.6
	I1VZV6	Hemoglobin alpha 1 OS=Homo sapiens GN=HBA1 PE=3 SV=1	141.29	4	30 85 100 108		36.6
	E9M4D4	Hemoglobin alpha-1 globin chain (Fragment) OS=Homo sapiens GN=HBA1 PE=3 SV=1	141.29	4	30 85 100 108		36.6
	D1MGQ2	Alpha-2 globin chain OS=Homo sapiens GN=HBA2 PE=2 SV=1	141.29	4	30 85 100 108		36.6
7	P13533	Myosin-6 OS=Homo sapiens GN=MYH6 PE=1 SV=5	118.42	3	34 89 115		4.8
	P12883	Myosin-7 OS=Homo sapiens GN=MYH7 PE=1 SV=5	118.42	3	34 89 115		4.8
	D9YZU2	Myosin, heavy chain 6, cardiac muscle, alpha OS=Homo sapiens GN=MYH6 PE=2 SV=1	118.42	3	34 89 115		4.8
	A5YM51	MYH7 protein (Fragment) OS=Homo sapiens GN=MYH7 PE=2 SV=1	118.42	3	34 89 115		4.8
8	P01185	Vasopressin-neurophysin 2-copeptin OS=Homo sapiens GN=AVP PE=1 SV=2	111.88	4	3 74 88 106		12.2
9	P01308	Insulin OS=Homo sapiens GN=INS PE=1 SV=1	100.84	2	35 70		25.5
	I3WAC9	Preproinsulin OS=Homo sapiens GN=INS PE=3 SV=1	100.84	2	35 70		25.5
	F6MZK5	Insulin (Precursor) OS=Homo sapiens GN=INS PE=2 SV=1	100.84	2	35 70		25.5
	A6XGL2	Insulin OS=Homo sapiens GN=INS PE=3 SV=1	100.84	2	35 70		25.5
10	P30049	ATP synthase subunit delta, mitochondrial OS=Homo sapiens GN=ATP5D PE=1 SV=2	97.02	2	47 50		7.1
11	G3V1N2	HCG1745306, isoform CRA_a OS=Homo sapiens GN=HBA2 PE=3 SV=1	75.60	3	43 107 113		29.1
12	H7BZJ3	Thioredoxin (Fragment) OS=Homo sapiens GN=PDIA3 PE=2 SV=1	73.00	1	52		11.4
13	A7XZE4	Beta tropomyosin isoform OS=Homo sapiens GN=TPM2b PE=2 SV=1	72.44	3	25 32 117		28.9
14	Q59FG9	Chondroitin sulfate proteoglycan 2 (Versican) variant (Fragment) OS=Homo sapiens PE=2 SV=1	64.82	1	101		36.6
	P13611	Versican core protein OS=Homo sapiens GN=VCAN PE=1 SV=3	64.82	1	101		36.6
15	Q6LAM1	Heavy chain of factor I (Fragment) OS=Homo sapiens PE=2 SV=1	60.03	1	121		7.2
16	P17540	Creatine kinase S-type, mitochondrial OS=Homo sapiens GN=CKMT2 PE=1 SV=2	59.29	1	40		5.7
	D6RHV3	Creatine kinase S-type, mitochondrial (Fragment) OS=Homo sapiens GN=CKMT2 PE=2 SV=1	59.29	1	40		5.7
	D6R998	Creatine kinase S-type, mitochondrial (Fragment) OS=Homo sapiens GN=CKMT2 PE=2 SV=1	59.29	1	40		5.7

	B3KVA7	cDNA FLJ16309 fis, clone SKMUS2007816, highly similar to Creatine kinase, sarcomeric mitochondrial (EC 2.7.3.2) OS=Homo sapiens PE=2 SV=1	59.29	1	40		5.7
	B2R8A3	cDNA, FLJ93805, highly similar to Homo sapiens creatine kinase, mitochondrial 2 (sarcomeric) (CKMT2), nuclear gene encoding mitochondrial protein, mRNA OS=Homo sapiens PE=2 SV=1	59.29	1	40		5.7
17	B4E1B2	cDNA FLJ53691, highly similar to Serotransferrin OS=Homo sapiens PE=2 SV=1	56.27	1	18		54.7
18	Q6FHV6	ENO2 protein OS=Homo sapiens GN=ENO2 PE=2 SV=1	53.23	1	77		3.2
	P09104	Gamma-enolase OS=Homo sapiens GN=ENO2 PE=1 SV=3	53.23	1	77		3.2
	F5H0C8	Enolase OS=Homo sapiens GN=ENO2 PE=2 SV=1	53.23	1	77		3.2
	B7Z2X9	Enolase OS=Homo sapiens GN=ENO2 PE=2 SV=1	53.23	1	77		3.2
	A8K3B0	cDNA FLJ77877, highly similar to Human ENO2 neuron specific (gamma) enolase OS=Homo sapiens PE=2 SV=1	53.23	1	77		3.2
19	Q08043	Alpha-actinin-3 OS=Homo sapiens GN=ACTN3 PE=1 SV=2	51.37	1	82		2.8
	P35609	Alpha-actinin-2 OS=Homo sapiens GN=ACTN2 PE=1 SV=1	51.37	1	82		2.8
	B7Z4V1	cDNA FLJ55401, highly similar to Alpha-actinin-2 OS=Homo sapiens PE=2 SV=1	51.37	1	82		2.8
	B4DZQ2	cDNA FLJ58651, highly similar to Alpha-actinin-3 OS=Homo sapiens PE=2 SV=1	51.37	1	82		2.8
	B2R8Y4	cDNA, FLJ94117, highly similar to Homo sapiens actinin, alpha 3 (ACTN3), mRNA OS=Homo sapiens PE=2 SV=1	51.37	1	82		2.8
20	Q0QEN7	ATP synthase subunit beta (Fragment) OS=Homo sapiens GN=ATP5B PE=2 SV=1	49.48	1	94		5.4
	P06576	ATP synthase subunit beta, mitochondrial OS=Homo sapiens GN=ATP5B PE=1 SV=3	49.48	1	94		5.4
	F8W079	ATP synthase subunit beta, mitochondrial (Fragment) OS=Homo sapiens GN=ATP5B PE=2 SV=1	49.48	1	94		5.4
	F8VQY0	ATP synthase subunit beta, mitochondrial (Fragment) OS=Homo sapiens GN=ATP5B PE=2 SV=1	49.48	1	94		5.4
	F8VPV9	ATP synthase subunit beta OS=Homo sapiens GN=ATP5B PE=2 SV=1	49.48	1	94		5.4
21	P16615	Sarcoplasmic/endoplasmic reticulum calcium ATPase 2 OS=Homo sapiens GN=ATP2A2 PE=1 SV=1	46.17	1	11		4.0
	H7C5W9	Sarcoplasmic/endoplasmic reticulum calcium ATPase 2 (Fragment) OS=Homo sapiens GN=ATP2A2 PE=3 SV=1	46.17	1	11		4.0
22	Q53HG2	NADH dehydrogenase (Ubiquinone) Fe-S protein 2, 49kDa (NADH-coenzyme Q reductase) variant (Fragment) OS=Homo sapiens PE=2 SV=1	43.40	1	124		5.0
	O75306	NADH dehydrogenase [ubiquinone] iron-sulfur protein 2, mitochondrial OS=Homo sapiens GN=NDUFS2 PE=1 SV=2	43.40	1	124		5.0
23	Q6FI52	TAGLN protein OS=Homo sapiens GN=TAGLN PE=2 SV=1	41.32	1	112		6.0
	Q5U0D2	Putative uncharacterized protein DKFzP686P11128 OS=Homo sapiens GN=TAGLN PE=2 SV=1	41.32	1	112		6.0
	Q53GC9	Transgelin variant (Fragment) OS=Homo sapiens PE=2 SV=1	41.32	1	112		6.0

	Q01995	Transgelin OS=Homo sapiens GN=TAGLN PE=1 SV=4	41.32	1	112		6.0
	E9PJ32	Transgelin (Fragment) OS=Homo sapiens GN=TAGLN PE=2 SV=1	41.32	1	112		6.0
24	Q5JQ13	Vinculin (Fragment) OS=Homo sapiens GN=VCL PE=2 SV=1	41.25	1	22		1.1
	P18206	Vinculin OS=Homo sapiens GN=VCL PE=1 SV=4	41.25	1	22		1.1
	B4E3Q9	cDNA FLJ59659, highly similar to Vinculin OS=Homo sapiens PE=2 SV=1	41.25	1	22		1.1
	B3KXA2	cDNA FLJ45031 fis, clone BRAWH3018548, highly similar to Vinculin OS=Homo sapiens PE=2 SV=1	41.25	1	22		1.1
25	P06753	Tropomyosin alpha-3 chain OS=Homo sapiens GN=TPM3 PE=1 SV=1	40.15	1	93		19.3
	J3KN67	Tropomyosin alpha-3 chain OS=Homo sapiens GN=TPM3 PE=3 SV=1	40.15	1	93		19.3
26	A1A5C4	RRBP1 protein OS=Homo sapiens GN=RRBP1 PE=2 SV=1	38.79	1	59		1.1
27	A0N4V7	HCG2039797 (Fragment) OS=Homo sapiens GN=Tcr-alpha PE=4 SV=1	34.78	1	95		38.1
28	Q96BA4	NUCB1 protein OS=Homo sapiens PE=2 SV=1	34.55	1	2		6.5
	Q53GX6	Nucleobindin 1 variant (Fragment) OS=Homo sapiens PE=2 SV=1	34.55	1	2		6.5
	Q02818	Nucleobindin-1 OS=Homo sapiens GN=NUCB1 PE=1 SV=4	34.55	1	2		6.5
	B4DZX0	cDNA FLJ52898, highly similar to Nucleobindin-1 OS=Homo sapiens PE=2 SV=1	34.55	1	2		6.5
	B3KUR6	cDNA FLJ40471 fis, clone TESTI2042508, highly similar to Nucleobindin-1 OS=Homo sapiens PE=2 SV=1	34.55	1	2		6.5
	A8K7Q1	cDNA FLJ77770, highly similar to Homo sapiens nucleobindin 1 (NUCB1), mRNA OS=Homo sapiens PE=2 SV=1	34.55	1	2		6.5

**UniProt  
Human  
Protein  
IDs,  
cont.**

Gr p Nr.	Accession Number	Protein Name	Protein Score	Unique PSMs	PSM Serial Nrs.	Other Grp.	% Seq. Cove r.
29	Q9Y2G9	Protein strawberry notch homolog 2 OS=Homo sapiens GN=SBNO2 PE=2 SV=3	34.02	1	29		1.2
	K7ES28	Protein strawberry notch homolog 2 OS=Homo sapiens GN=SBNO2 PE=4 SV=1	34.02	1	29		1.2
30	B4DUA3	cDNA FLJ50067, weakly similar to Dynamin-binding protein OS=Homo sapiens PE=2 SV=1	33.75	1	66		27.4

	B4DTT4	cDNA FLJ54440, weakly similar to Dynamin-binding protein OS=Homo sapiens PE=2 SV=1	33.75	1	66		27.4
	A1IGU5	Rho guanine nucleotide exchange factor 37 OS=Homo sapiens GN=ARHGEF37 PE=2 SV=2	33.75	1	66		27.4
31	P10809	60 kDa heat shock protein, mitochondrial OS=Homo sapiens GN=HSPD1 PE=1 SV=2	33.35	1	97		5.4
	B7Z5E7	cDNA FLJ51046, highly similar to 60 kDa heat shock protein, mitochondrial OS=Homo sapiens PE=2 SV=1	33.35	1	97		5.4
	B7Z597	cDNA FLJ54373, highly similar to 60 kDa heat shock protein, mitochondrial OS=Homo sapiens PE=2 SV=1	33.35	1	97		5.4
	B7Z532	cDNA FLJ51028, highly similar to 60 kDa heat shock protein, mitochondrial OS=Homo sapiens PE=2 SV=1	33.35	1	97		5.4
	B3GQS7	Mitochondrial heat shock 60kD protein 1 variant 1 OS=Homo sapiens GN=HSPD1 PE=2 SV=1	33.35	1	97		5.4
32	Q567R0	UQCRH protein OS=Homo sapiens GN=UQCRH PE=2 SV=1	31.31	1	78		8.2
	P07919	Cytochrome b-c1 complex subunit 6, mitochondrial OS=Homo sapiens GN=UQCRH PE=1 SV=2	31.31	1	78		8.2
33	B8ZZ54	10 kDa heat shock protein, mitochondrial OS=Homo sapiens GN=HSPE1 PE=3 SV=1	30.40	1	90		53.2
34	F4MHR1	Ubiquitously transcribed tetratricopeptide repeat protein Y-linked transcript variant 83 OS=Homo sapiens GN=UTY PE=2 SV=1	30.01	1	67		27.4
35	Q99798	Aconitate hydratase, mitochondrial OS=Homo sapiens GN=ACO2 PE=1 SV=2	27.89	1	116		3.0
	Q71UF1	Aconitase OS=Homo sapiens GN=ACO2 PE=2 SV=1	27.89	1	116		3.0
	O75944	Aconitase (Fragment) OS=Homo sapiens GN=ACON PE=2 SV=1	27.89	1	116		3.0
	B4DZ08	cDNA FLJ51705, highly similar to Aconitate hydratase, mitochondrial (EC 4.2.1.3) OS=Homo sapiens PE=2 SV=1	27.89	1	116		3.0
	B4DW08	cDNA FLJ50886, highly similar to Aconitate hydratase, mitochondrial (EC 4.2.1.3) OS=Homo sapiens PE=2 SV=1	27.89	1	116		3.0
	B4DLY4	cDNA FLJ52327, highly similar to Aconitate hydratase, mitochondrial (EC 4.2.1.3) OS=Homo sapiens PE=2 SV=1	27.89	1	116		3.0
	B4DJW1	cDNA FLJ54329, highly similar to Aconitate hydratase, mitochondrial (EC 4.2.1.3) OS=Homo sapiens PE=2 SV=1	27.89	1	116		3.0
	B4DEC3	cDNA FLJ60429, highly similar to Aconitate hydratase, mitochondrial (EC 4.2.1.3) OS=Homo sapiens PE=2 SV=1	27.89	1	116		3.0
	B2RBW5	cDNA, FLJ95737, highly similar to Homo sapiens aconitase 2, mitochondrial (ACO2), nuclear gene encoding mitochondrial protein, mRNA OS=Homo sapiens PE=2 SV=1	27.89	1	116		3.0
	A2A274	Aconitate hydratase, mitochondrial OS=Homo sapiens GN=ACO2 PE=4 SV=1	27.89	1	116		3.0
36	D9YZV8	Tropomyosin 1 (Alpha) isoform 7 OS=Homo sapiens GN=TPM1 PE=3 SV=1	27.22	1	76		35.6
37	Q5CZ94	Putative uncharacterized protein DKFZp781M0386 OS=Homo sapiens GN=DKFZp781M0386 PE=2 SV=1	26.67	1	9		13.4

38	Q12904	Aminoacyl tRNA synthase complex-interacting multifunctional protein 1 OS=Homo sapiens GN=AIMP1 PE=1 SV=2	25.18	1	83		2.6
39	H0Y450	Probable arginine--tRNA ligase, mitochondrial (Fragment) OS=Homo sapiens GN=RARS2 PE=3 SV=1	24.66	1	71		25.5
40	Q05CG0	ARID4A protein (Fragment) OS=Homo sapiens GN=ARID4A PE=2 SV=1	24.65	1	7		56.6
	P29374	AT-rich interactive domain-containing protein 4A OS=Homo sapiens GN=ARID4A PE=1 SV=3	24.65	1	7		6.5
	C9J1W3	AT-rich interactive domain-containing protein 4A (Fragment) OS=Homo sapiens GN=ARID4A PE=2 SV=1	24.65	1	7		6.5
41	Q02045	Myosin light chain 5 OS=Homo sapiens GN=MYL5 PE=2 SV=1	23.73	1	68		9.5
	D6RJ91	Myosin light chain 5 (Fragment) OS=Homo sapiens GN=MYL5 PE=2 SV=1	23.73	1	68		9.5
	D6RA88	Myosin light chain 5 OS=Homo sapiens GN=MYL5 PE=2 SV=1	23.73	1	68		9.5
42	Q7Z3Z1	Myosin light chain 2 OS=Homo sapiens PE=2 SV=1	23.73	1	14		6.0
	Q6IB42	MYL2 protein OS=Homo sapiens GN=MYL2 PE=2 SV=1	23.73	1	14		6.0
	Q14908	Cardiac ventricular myosin light chain-2 OS=Homo sapiens PE=2 SV=1	23.73	1	14		6.0
	P10916	Myosin regulatory light chain 2, ventricular/cardiac muscle isoform OS=Homo sapiens GN=MYL2 PE=1 SV=3	23.73	1	14		6.0
	F8VWQ7	Myosin regulatory light chain 2, ventricular/cardiac muscle isoform (Fragment) OS=Homo sapiens GN=MYL2 PE=2 SV=1	23.73	1	14		6.0
43	Q6MZ0	Putative uncharacterized protein DKFZp686B12213 (Fragment) OS=Homo sapiens GN=DKFZp686B12213 PE=2 SV=1	20.72	1	15		6.0
	Q13099	Intraflagellar transport protein 88 homolog OS=Homo sapiens GN=IFT88 PE=2 SV=2	20.72	1	15		6.0
	F5H6C2	Intraflagellar transport protein 88 homolog OS=Homo sapiens GN=IFT88 PE=2 SV=1	20.72	1	15		6.0
	E7EW86	Intraflagellar transport protein 88 homolog OS=Homo sapiens GN=IFT88 PE=2 SV=1	20.72	1	15		6.0
	B3KX42	cDNA FLJ44712 fis, clone BRACE3019941, highly similar to Intraflagellar transport 88 homolog OS=Homo sapiens PE=2 SV=1	20.72	1	15		6.0

Group Nr.

By the rule of parsimony, we have gathered all proteins sharing the same identified peptides into a single group.

Accession Nr.

The accession number from the searched database (DB).

Protein Name

The protein name in the DB.

Protein Score

Sum of the contributing peptide scores.

NOTE: This score can only be used to support the identification of **one** protein per group.  
*Unique PSMs.*

The number of unique peptide-spectrum matches that contribute to the protein assignment.  
*PSM Serial Nrs.*

Sequential number of assigned peptide (in the following table.)  
*Other Grp.*

If the protein is assigned to another group, that (those) group number(s).  
*% Seq. Cover.*

Percent sequence coverage of this protein.

## Assigned Peptides

#	Sequence	PTM Site	Nr. Scans	Mascot Score	Expectation	Isolated Mass	Delta Mass	Charge State	Matched Ions	Scan Nr.
1	R.GYSFVTTAER.E		1	39.900	0.012	565.78	0.1	2	'7/18	2270
2	R.FEEELAAR.E		1	34.550	0.047	482.74	1.7	2	'7/14	1776
3	R.QCLPCGPGGKGR.C		2	31.680	0.081	429.54	-0.1	3	'7/22	1939
4	K.CSTSSLLEACTFR.R		4	99.580	5.9e-009	766.35	-1.5	2	'10/24	3100
5	K.YLGEEYVK.A		2	31.820	0.061	500.75	0.7	2	'11/14	2464
6	K.YLGEEYVKAVGNLRK.C		4	25.160	0.34	435.49	-0.1	4	'10/28	4035
7	K.FYSIAR.K		3	24.650	0.24	378.70	-15.0	2	'4/10	3010
8	K.LVTDLTK.V		11	44.370	0.0043	395.24	-0.6	2	'6/12	1539
9	R.TLIYDTSK.H		1	26.670	0.21	506.28	11.0	2	'4/16	1985
10	R.YLYEIAR.R		5	31.910	0.075	464.25	0.0	2	'6/12	2602
11	K.TASEMVLADDFSTIVAAVEEGR.A	0.00001000000000000000000.0	2	46.170	0.0027	814.39	-1.4	3	'22/44	4852
12	K.EGYGYTGAFR.C		2	56.700	0.0001	642.29	-0.2	2	'8/20	2969
13	K.SVIPSDGSPVACVK.K		6	74.760	3.9e-006	708.36	0.4	2	'8/26	2338
14	K.EAFTIMDQNR.D	0.0000010000.0	1	23.730	0.25	620.78	-1.8	2	'5/18	1869



15	K.EALRNDSSCTEALYNIGL TYEKLNR.L		1	20.720	1.2	489.25	9.0	6	'7/48	4532
16	K.IQVLQQQADDAEER.A		1	87.950	2.3e-007	821.91	0.4	2	'9/26	2070
17	K.DCHLAQVPSHTVVAR.S		8	54.680	0.00051	563.95	-0.4	3	'11/28	2376
18	K.SVEEYANCHLAR.A		2	56.270	0.00074	724.83	-0.3	2	'9/22	2182
19	R.SKQLEEDIAAKEK.L		2	21.490	1.2	496.94	2.1	3	'12/24	2132
20	K.ASYLDCIR.A		4	48.130	0.0015	499.24	2.8	2	'12/14	2527
21	K.IECVSAETTEDCIAK.I		4	77.330	9.2e-007	863.39	-0.7	2	'9/28	2018
22	R.ELTPQVVSAAR.I		1	41.250	0.017	585.83	1.1	2	'7/20	2101
23	K.VPQVSTPTLVEVSR.N		1	52.860	0.00049	756.43	0.2	2	'9/26	2906
24	R.DDTVCLAK.L		2	35.020	0.039	461.22	0.4	2	'7/14	1385
25	R.ARQLEEEELR.T		1	20.950	2.2	381.88	-0.3	3	'7/16	2242
26	R.SAGWNIPIGLLYCDLPEP RKPLEK.A		1	55.210	0.00024	692.37	4.0	4	'14/46	4991
27	K.DSGFQMNQLRGK.K		2	28.200	0.21	460.90	1.4	3	'8/22	2453
28	K.IWHHTFYNELR.V		4	24.350	0.48	505.92	-2.4	3	'8/20	4315
29	K.AVLDLQNK.L		2	34.020	0.06	450.76	-0.3	2	'5/14	2680
30	K.VGAHAGEYGAERALER.M		2	57.510	0.00018	510.58	-0.1	3	'7/28	2950
31	R.KCSTSSLLEACTFRFP.-		6	37.390	0.026	638.32	0.1	3	'7/30	3333
32	R.QLEEEELR.T		1	24.190	0.6	458.74	-1.0	2	'4/12	1670
33	K.CDEWSVNSVGK.I		2	65.220	1.1e-005	640.78	0.0	2	'8/20	2217
34	R.ELEEISERLEEAGGATS VQIEMNK.K	0.00000000000000000000 0100.0	5	67.440	1.9e-005	893.43	0.5	3	'17/46	3840
35	R.GFFYTPK.T		1	28.340	0.15	430.22	-0.5	2	'5/12	3008
36	K.KSASDLTWDNLK.G		2	26.550	0.37	459.91	-0.1	3	'12/22	2794
37	K.SASDLTWDNLK.G		2	65.950	3.8e-005	625.31	1.2	2	'8/20	3041
38	R.LKCDEWSVNSVGK.I		4	74.770	5e-006	761.37	1.2	2	'19/24	2566
39	K.CCTESLVNR.R		1	46.630	0.00083	569.75	-1.2	2	'7/16	1482
40	K.TVGMVAGDEESYEVFAD LFDPIK.L	0.00010000000000000000 0000.0	1	59.290	0.00013	883.09	-0.2	3	'23/46	5334
41	K.HSTIFENLANK.A		4	68.970	2.4e-005	637.33	0.0	2	'9/20	3402
42	R.KLVIIESDLER.A		4	34.360	0.038	657.89	3.7	2	'6/20	3485
43	-.MFLSFPTTK.T		1	23.880	0.48	536.28	-0.7	2	'7/16	3786
44	K.SVIPSDGSPVACVKK.A		6	43.190	0.0079	772.41	0.0	2	'7/28	2261
45	K.CASLQKFGER.A		2	49.980	0.0013	598.30	-0.4	2	'7/18	2062
46	K.SASDLTWDNLKKGK.K		4	83.010	8e-007	717.86	-0.8	2	'10/24	2647
47	R.IEANEALVKALE.-		1	57.940	0.00031	650.36	2.9	2	'18/22	3636
48	K.SDNCEDTPEAGYFAVAV VKK.S		2	62.150	5.3e-005	734.01	-1.1	3	'19/38	3272
49	R.WCAVSEHEATK.C		10	57.410	0.0001	659.30	2.6	2	'9/20	1756
50	R.IEANEALVK.A		1	39.080	0.02	493.78	0.0	2	'8/16	1701

51	R.EQAEAEVASLNR.R		1	39.670	0.013	658.83	2.2	2	'8/22	1844
52	-.SDVLELTDNFSR.I		1	73.000	3.5e-006	820.38	1.6	2	'9/26	3507
53	K.KSASDLTWDNLKKGK.K		2	73.960	8.2e-006	521.61	0.3	3	'10/26	2697
54	K.KATDAEADVASLNR.R		2	24.120	0.62	539.62	-0.7	3	'8/28	2116
55	R.CLVEKGDVAFVK.H		2	63.220	0.00011	455.58	-0.1	3	'11/22	2973
56	R.KCSTSSLLEACTFR.R		2	35.640	0.027	553.93	2.1	3	'7/26	3051
57	K.SKEFQLFSSPHGK.D		4	43.840	0.0088	497.92	-1.3	3	'6/24	3482
58	K.LHDRNTYEKYLGEYVK.A		2	22.680	0.75	540.02	-0.3	4	'9/32	3810
59	R.EQEITAVQAR.M		1	38.790	0.021	572.80	3.8	2	'7/18	1452
60	R.EGTCPEAPTDECKPVKW.CALSHHER.L		6	25.370	0.22	749.34	1.3	4	'18/48	3596
61	K.LCYVALDFENEMATAAS.SSSLEK.S		3	78.030	1.1e-006	846.06	-0.4	3	'22/44	4704
62	K.YLGEYVKAVGNLR.K		2	21.260	1	537.62	0.5	3	'12/26	4192
63	K.HIAEDADRKYEEVAR.K		2	27.720	0.2	451.22	-4.0	4	'12/28	2533
64	R.FDEFFSEGCAPGSKK.D		2	22.750	0.35	569.26	0.8	3	'11/28	3330
65	R.IQLVEEELDR.A		6	62.070	8.9e-005	622.33	0.2	2	'8/18	3000
66	R.QAGLNKDPR.C		1	33.750	0.045	499.77	-9.3	2	'6/16	1794
67	K.KMMEGK.A	0.011000.0	1	30.010	0.048	378.18	13.1	2	'5/10	2377
68	K.EAFTLMDQNR.D	0.0000010000.0	1	23.730	0.25	620.78	-1.8	2	'5/18	1869
69	K.CLKDGAGDVAFAVK.H		2	54.850	0.00065	460.57	-1.1	3	'19/24	2890
70	R.GIVEQCCTSICSLYQLEN.YCN.-		3	72.500	9.9e-007	871.04	-0.2	3	'18/40	4389
71	-.TFQSVESSTR.K		1	24.660	0.43	381.19	15.7	3	'4/18	2488
72	K.DKEACVHKILR.Q		4	32.260	0.069	456.92	0.4	3	'11/20	2830
73	R.EGTCPEAPTDECKPVK.W		4	54.160	0.00018	909.41	-0.4	2	'8/30	1455
74	R.AMSDLELR.Q	0.01000000.0	1	25.740	0.41	475.74	7.1	2	'6/14	1685
75	R.DDTVCLAKLHDR.N		2	38.660	0.016	481.57	0.3	3	'13/22	2428
76	K.AEADVASLNR.R		1	27.220	0.27	401.21	-0.1	3	'5/20	1574
77	R.IEEELGDEAR.F		1	53.230	0.00032	580.78	0.0	2	'16/18	1570
78	R.LELCDER.V		1	31.310	0.069	467.72	3.0	2	'6/12	1625
79	K.HSTIFENLANKADR.D		2	42.490	0.0092	539.28	1.4	3	'14/26	3751
80	R.SETKDLLFRDDTVCLAK.L		4	31.370	0.1	671.01	-0.3	3	'10/32	3553
81	R.SETKDLLFR.D		4	37.330	0.025	554.80	0.2	2	'12/16	2821
82	K.AIMTYVSCFYHAFAGAE.QAETAANR.I	0.00100000000000000000.0	1	51.370	0.00053	932.43	4.1	3	'12/48	4840
83	R.IGCIITAR.K		1	25.180	0.54	452.26	2.5	2	'6/14	2206
84	K.MYLGYEYVTAIR.N	0.100000000000.0	4	70.690	1.2e-005	747.87	3.0	2	'8/22	3885

85	R.MFLSFPTTK.T	0.100000000.0	2	28.670	0.17	544.28	-3.1	2	'5/16	3579
86	K.DGAGDVAFVK.H		2	67.570	2.7e-005	489.75	0.0	2	'9/18	2147
87	K.MYLGYEYVTAIRNLR.E	0.1000000000000000.0	10	22.980	0.75	626.66	-0.1	3	'8/28	4586
88	R.AMSDLELRQCLPCGPG GKGR.C	0.0100000000000000000.0	1	27.530	0.18	555.27	-0.9	4	'20/38	3201
89	K.EKSEFKLEDDVTSNME QIIK.A	0.000000000000000010000 0.0	1	23.600	0.5	628.82	2.0	4	'7/40	4180
90	R.DGDILGKYVD.-		1	30.400	0.12	547.77	1.6	2	'6/18	3219
91	R.LKCDEWSVNSVGKIECV SAETTEDCIAK.I		2	27.880	0.13	807.88	0.0	4	'19/54	4057
92	K.HQTVPQNTGGKNPDPW AK.N		4	36.330	0.036	659.00	0.6	3	'16/34	2457
93	K.AADAEAEVASLNR.R		1	40.150	0.012	658.83	2.2	2	'8/24	1844
94	K.SLQDIIAILGMDELSEED KLTVSR.A	0.00000000001000000000 0000.0	1	49.480	0.0015	897.80	-1.5	3	'11/46	5351
95	K.GITLSVRP.-		1	34.780	0.029	421.76	0.6	2	'4/14	1888
96	K.KASYLDCIR.A		4	44.520	0.0042	563.29	-2.0	2	'6/16	2579
97	R.KPLVIAEDVDGEALSTL VLNR.L		1	33.350	0.018	789.12	-1.4	3	'17/42	5386
98	K.DLLFRDDTVCLAK.L		4	54.180	0.0015	783.40	1.3	2	'7/24	3752
99	K.ATDAEADVASLNR.R		2	26.140	0.35	496.92	-1.0	3	'7/26	1866
100	K.AAWGKVGAHAGEYGAE ALER.M		1	31.230	0.11	511.51	-1.1	4	'7/38	3996
101	R.AQCGGGLLGV.R		1	64.820	5.5e-005	544.29	-0.5	2	'9/20	2492
102	K.AGFAGDDAPR.A		2	46.260	0.0015	488.73	0.9	2	'8/18	1460
103	K.EACVHKILR.Q		2	27.940	0.19	375.88	-0.9	3	'8/16	2662
104	K.MYLGYEYVTAIRNLR.E		2	23.450	0.67	621.33	-0.5	3	'7/28	4687
105	R.KLVIIESDLERAER.A		2	27.580	0.2	600.67	0.7	3	'7/28	3939
106	R.QCLPCGPGGK.G		1	26.930	0.097	537.25	0.7	2	'7/18	1511
107	M.FLSFPTTK.T		1	23.050	0.41	470.76	1.2	2	'4/14	3119
108	R.MFLSFPTTK.T		1	23.880	0.48	536.28	-0.7	2	'7/16	3786
109	K.KVPQVSTPTLVEVSR.N		19	67.530	1.1e-005	820.47	-0.5	2	'12/28	2929
110	R.IQLVEEELDRAQER.L		6	35.040	0.048	576.64	0.9	3	'7/26	3190
111	R.NLREGTCPEAPTDECKP VK.W		2	22.220	1.7	551.01	0.8	4	'13/36	2314
112	K.YDEELEER.L		1	41.320	0.0028	541.74	0.1	2	'6/14	1457
113	-.MFLSFPTTK.T	0.100000000.0	2	28.670	0.17	544.28	-3.1	2	'5/16	3579
114	K.EFQLFSSPHGK.D		2	33.860	0.064	426.22	0.2	3	'6/20	3327
115	R.SEAPPHIFSISDNAYQYM LTDRENQSILITGESGAGK. T	0.00000000000000000100 0000000000000000.0	1	27.380	0.13	1014.7 4	6.0	4	'6/72	4312

116	K.HPNGTQETILLNHTFNET QIEWFR.A		1	27.890	0.19	732.11	1.9	4	'25/46	4829
117	K.HIAEDSDRKYEEVAR.K		1	27.300	0.27	455.23	4.7	4	'14/28	2315
118	K.CSTSSLLEACTFRRP.-		10	36.680	0.024	595.62	-1.5	3	'8/28	3341
119	K.LCYVALDFENEMATAAS SSSLEK.S	0.00000000000100000000 000.0	7	78.570	8.3e-007	851.39	-2.1	3	'22/44	4247
120	K.SIDDLLEEK.V		2	41.260	0.014	474.73	0.4	2	'11/14	1591
121	-.KVTYTSQEDLVEKK.C		1	60.030	0.00013	556.63	-1.3	3	'10/26	1984
122	K.DSGFQMNQLR.G		2	55.380	0.0003	598.28	4.3	2	'9/18	2581
123	K.SVIPSDGSPVACVKKAS YLDCIR.A		4	26.680	0.3	631.32	-0.6	4	'17/44	3827
124	K.GHMLADVVAIGTQDIVF GEVDR.-	0.00100000000000000000 000.0	1	43.400	0.0068	824.42	-3.2	3	'17/44	5288

#

Serial (sequential) number for peptide.

*Sequence*

Assigned peptide sequence. Periods (".") delimit the sequence for internal peptides.

*PTM Site*

Location of the post-translational modification (PTM) in the peptide.

Modification codes: [1] Oxidation (M)

*Nr. Scans*

The number of MS/MS scans that were matched to this peptide.

*Mascot Score*

Score given to this peptide/spectrum match by Mascot.

*Expectation*

The number of matches with equal or better scores that are expected to occur by chance alone.

*Isolated Mass*

"Mass" in the Orbitrap analyzer.

*Delta Mass*

Difference between the observed and theoretical masses, in ppm.

*Charge State*

Inferred ionic state of the peptide.

*Matched Ions*

Number of matched MS/MS ions, as reported by Mascot.  
*Scan Nr.*

MS/MS scan number in the original Xcalibur RAW file.