Electronic Supplementary Material (ESI) for Journal of Analytical Atomic Spectrometry.

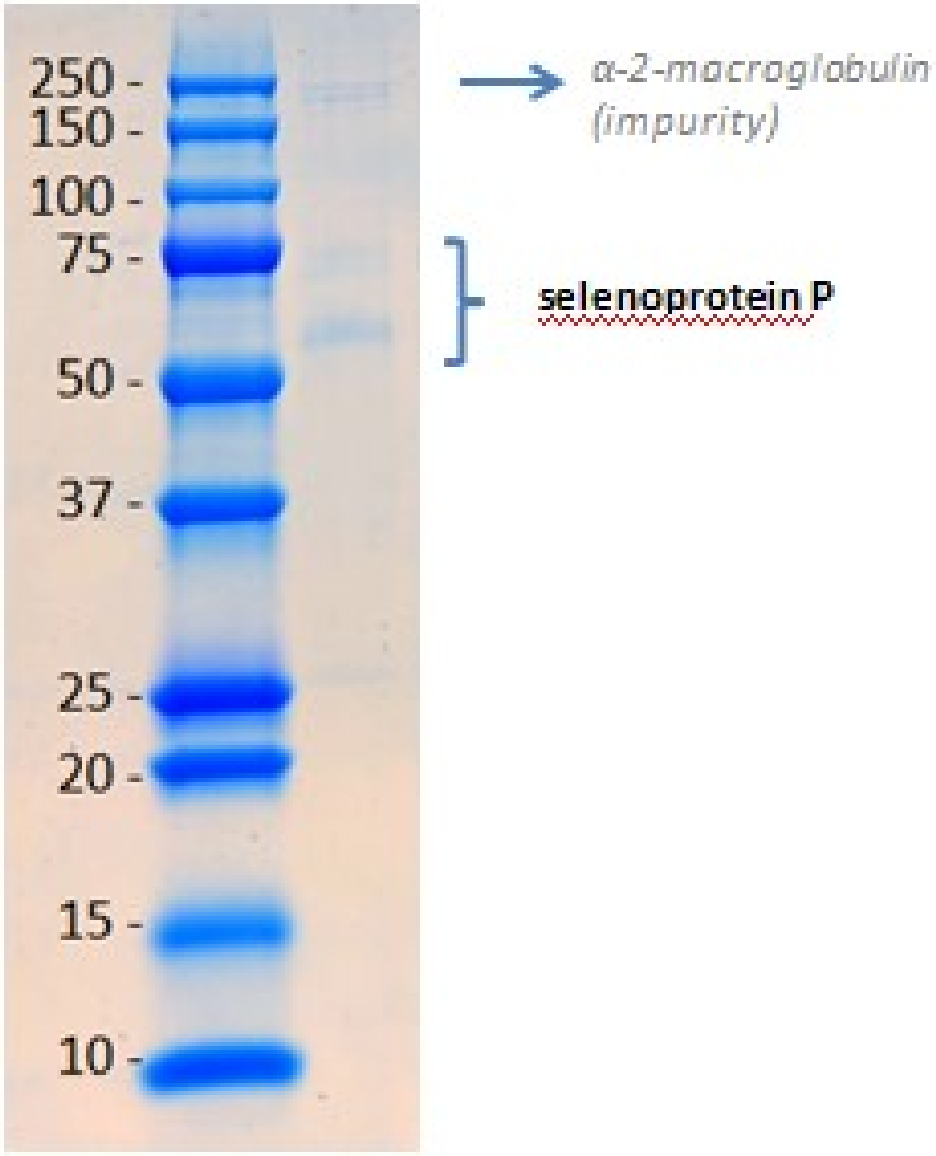

Fig. SI-1 PAGE analysis of the purified SelP preparation

FRAGMENTATION of *m/z* 3945 peptide

(a) mono charged fragments

#1		Seq.		#2
1		E		30
2		S	1267.16906	29
3		C		28
4	431.12311	Q		27
5		C		26
6	689.24939	R		25
7	820.34402	L		24
8		P	777.80907	23
9	996.43898	P		22
10		A	729.52869	21
11		A		20
12		C-KB_S_sugar		19
13		Q	769.98529	18
14		I	732.97461	17
15	966.87829	S	689.60441	16
16	412.96740	Q	990.38696	15
17	547.97207	Q	934.87094	14
18	767.98836	L	431.66783	13
19		I	814.29962	12
20	628.77729	P	757.75759	11
21		T		10
22	552.64665	E		9
23	704.05914	A		8
24	580.85517	S		7
25	991.09948	A		6
26	765.33443	S		5
27	881.33930	C-KBSecAu		4
28	920.61058	R		3
29	757.29176	C		2
30		K		1

b^{+}	y^{+}
b^{2+}	y^{2+}
b^{3+}	y^{3+}
b^{4+}	y^{4+}
b^{5+}	y^{5+}
$b\text{-}H_2O^{+}$	$y\text{-}H_2O^{+}$
$b\text{-}H_2O^{2+}$	$y\text{-}H_2O^{2+}$
$b\text{-}H_2O^{3+}$	$y\text{-}H_2O^{3+}$
$b\text{-}H_2O^{4+}$	$y\text{-}H_2O^{4+}$
$b\text{-}H_2O^{5+}$	$y\text{-}H_2O^{5+}$
$b\text{-}NH_3^{+}$	$y\text{-}NH_3^{+}$
$b\text{-}NH_3^{2+}$	$y\text{-}NH_3^{2+}$
$b\text{-}NH_3^{3+}$	$y\text{-}NH_3^{3+}$
$b\text{-}NH_3^{4+}$	$y\text{-}NH_3^{4+}$
$b\text{-}NH_3^{5+}$	$y\text{-}NH_3^{5+}$

(b) doubly charged fragments

#1		Seq.		#2
1		E		30
2		S	760.70434	29
3		C		28
4		Q		27
5		C		26
6	689.24939	R		25
7	820.34402	L		24
8		P	777.80907	23
9	996.43898	P		22
10		A	729.52869	21
11		A		20
12		C-KB_S_sugar	694.01014	19
13		Q	769.98529	18
14		I	732.97461	17
15	966.38628	S	689.60441	16
16	1030.90758	Q	990.38696	15
17	547.97207	Q	934.87094	14
18	773.66387	L	580.89686	13
19		I	814.29962	12
20	628.77729	P	757.75759	11
21		T		10
22	686.29986	E		9
23	704.05914	A		8
24	580.85517	S		7
25	990.77147	A		6
26	765.33443	S	471.11967	5
27	881.33930	C-KBSecAu		4
28	920.61058	R		3
29	757.29176	C		2
30		K		1

(c) triply charged fragments

#1		Seq.		#2
1		E		30
2		S	1267.16906	29
3		C		28
4	431.12311	Q	1209.49750	27
5		C		26
6	689.24939	R		25
7		L		24
8		P	777.80907	23
9	996.43898	P	758.04852	22
10		A	729.52869	21
11		A		20
12		C-KB_S_sugar	698.26677	19
13		Q	769.98529	18
14		I	732.97461	17
15	966.87829	S	689.60441	16
16	412.96740	Q	990.38696	15
17	547.97207	Q	934.87094	14
18	767.98836	L	431.66783	13
19		I		12
20	628.77729	P	757.75759	11
21		T		10
22		E	658.70737	9
23	704.05914	A		8
24	580.85517	S		7
25	991.09948	A		6
26	765.33443	S		5
27		C		4
28	740.09523	R		3
29	757.29176	C-KBSecAu		2
30		K		1

(d) +4 charged fragments

#1		Seq.		#2
1		E		30
2		S	760.70434	29
3		C		28
4		Q	1209.49750	27
5		C		26
6	689.24939	R		25
7		L		24
8		P	777.80907	23
9	996.43898	P	758.04852	22
10		A	729.52869	21
11		A		20
12		C-KB_S_sugar	694.01014	19
13		Q	769.98529	18
14		I	732.97461	17
15	966.38628	S	689.60441	16
16	1030.90758	Q	990.38696	15
17	547.97207	Q	934.87094	14
18	773.66387	L	580.89686	13
19		I		12
20	628.77729	P	757.75759	11
21		T		10
22	686.29986	E	658.70737	9
23	704.05914	A		8
24	580.85517	S		7
25	990.77147	A		6
26	765.33443	S	471.11967	5
27		C		4
28		R		3
29	757.29176	C-KBSecAu		2
30		K		1

FRAGMENTATION of *m/z* 3403 peptide

#1		Seq.		#2
1		G-Acetyl		29
2		S	1096.52536	28
3		V		27
4	369.17686	T	1034.49188	26
5		V	1000.80932	25
6		V		24
7		A		23
8		L		22
9		L	659.55094	21
10		Q	835.36729	20
11	1064.59864	A		19
12		S		18
13	651.79581	C-S_Se_subst	745.99491	17
14		Y	1034.49860	16
15	789.86951	L	952.96694	15
16	937.35664	C-KB_Pt		14
17		I	747.95376	13
18	1059.44599	L	700.41701	12
19	743.64376	Q	429.58574	11
20		A		10
21	796.33348	S		9
22	839.03180	K	500.81112	8
23	657.79668	L		7
24		E	759.43593	6
25		D		5
26	747.08508	L		4
27	786.11036	R		3
28		V		2
29		K		1

b^{+}	y^{+}
b^{2+}	y^{2+}
b^{3+}	y^{3+}
b^{4+}	y^{4+}
b^{5+}	y^{5+}
$b\text{-}H_2O^{+}$	$y\text{-}H_2O^{+}$
$b\text{-}H_2O^{2+}$	$y\text{-}H_2O^{2+}$
$b\text{-}H_2O^{3+}$	$y\text{-}H_2O^{3+}$
$b\text{-}H_2O^{4+}$	$y\text{-}H_2O^{4+}$
$b\text{-}H_2O^{5+}$	$y\text{-}H_2O^{5+}$
$b\text{-}NH_3^{+}$	$y\text{-}NH_3^{+}$
$b\text{-}NH_3^{2+}$	$y\text{-}NH_3^{2+}$
$b\text{-}NH_3^{3+}$	$y\text{-}NH_3^{3+}$
$b\text{-}NH_3^{4+}$	$y\text{-}NH_3^{4+}$
$b\text{-}NH_3^{5+}$	$y\text{-}NH_3^{5+}$