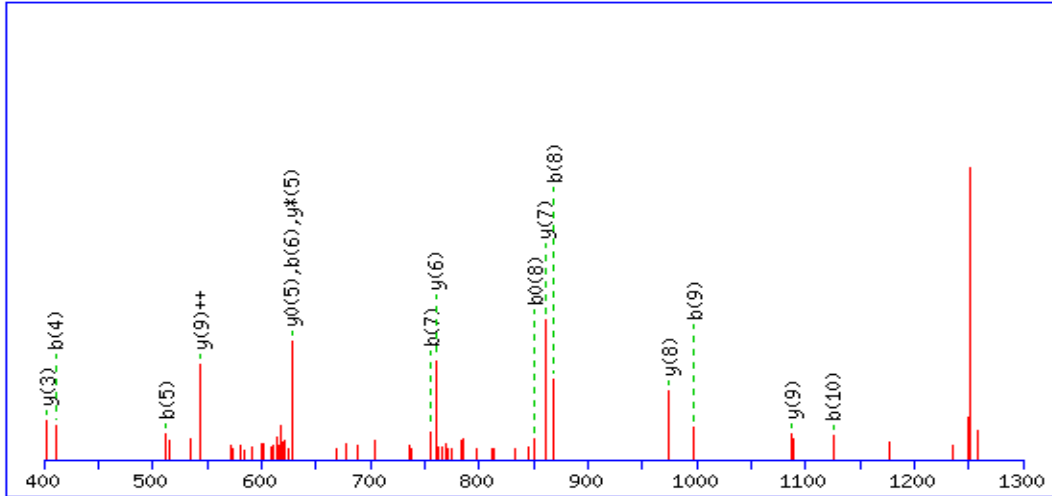


Supporting information
Appendix 5:

MS sequence confirmation data for *P. falciparum* SHMT peptide AILLTDELQK (unlabelled)



Monoisotopic mass of neutral peptide Mr(calc): 1270.71

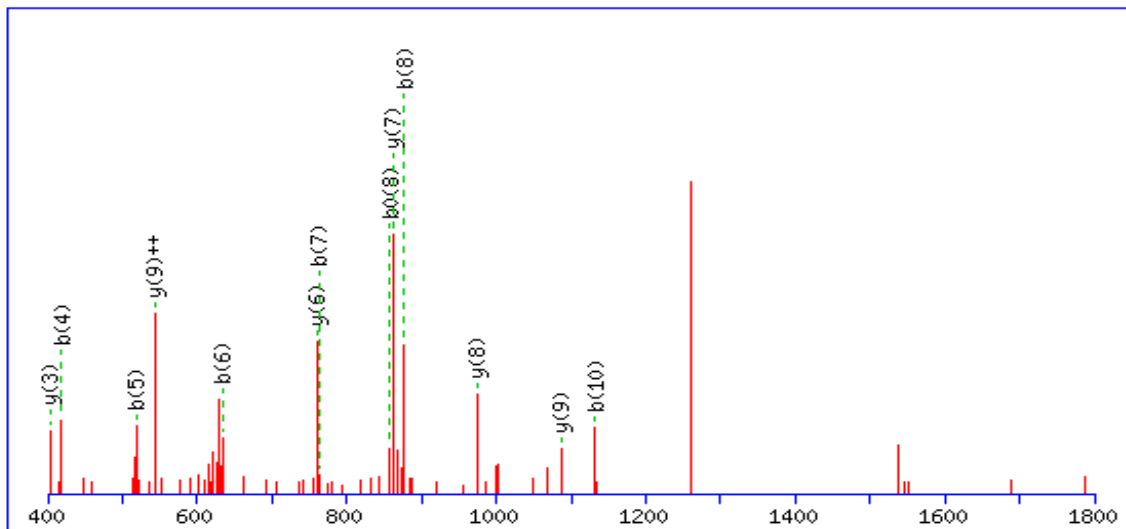
Ions Score: 45 **Expect:** 0.012

Matches (Bold Red): 16/88 fragment ions using 24 most intense peaks

#	b	b ⁺⁺	b ⁺	b ⁺⁺⁺	b ⁰	b ⁰⁺⁺	Seq.	y	y ⁺⁺	y ⁺	y ⁺⁺⁺	y ⁰	y ⁰⁺⁺	#
1	72.04	36.53					A							11
2	185.13	93.07					I	1200.68	600.85	1183.66	592.33	1182.67	591.84	10
3	298.21	149.61					L	1087.60	544.30	1070.57	535.79	1069.59	535.30	9
4	411.30	206.15					L	974.52	487.76	957.49	479.25	956.50	478.76	8
5	512.34	256.68			494.33	247.67	T	861.43	431.22	844.40	422.71	843.42	422.21	7
6	627.37	314.19			609.36	305.18	D	760.38	380.70	743.36	372.18	742.37	371.69	6
7	756.41	378.71			738.40	369.71	E	645.36	323.18	628.33	314.67	627.35	314.18	5
8	869.50	435.25			851.49	426.25	L	516.31	258.66	499.29	250.15			4
9	997.56	499.28	980.53	490.77	979.55	490.28	Q	403.23	202.12	386.20	193.61			3
10	1125.61	563.31	1108.59	554.80	1107.60	554.31	Q	275.17	138.09	258.14	129.58			2
11							K	147.11	74.06	130.09	65.55			1

Appendix 5a

MS sequence confirmation data for *P. falciparum* SHMT peptide AILLTDELQK (labelled) showing expected 7 Da mass increase in b ion series.



Monoisotopic mass of neutral peptide Mr(calc): 1277.76

Variable modifications:

I2 : Heavy IsoLeu

Ions Score: 47 **Expect:** 0.0083

Matches (Bold Red): 13/88 fragment ions using 18 most intense peaks

#	b	b ⁺⁺	b [*]	b ⁺⁺⁺	b ⁰	b ⁰⁺⁺	Seq.	y	y ⁺⁺	y [*]	y ⁺⁺⁺	y ⁰	y ⁰⁺⁺	#
1	72.04	36.53					A							11
2	192.18	96.59					I	1207.73	604.37	1190.71	595.86	1189.72	595.37	10
3	305.26	153.14					L	1087.60	544.30	1070.57	535.79	1069.59	535.30	9
4	418.35	209.68					L	974.52	487.76	957.49	479.25	956.50	478.76	8
5	519.40	260.20			501.38	251.20	T	861.43	431.22	844.40	422.71	843.42	422.21	7
6	634.42	317.71			616.41	308.71	D	760.38	380.70	743.36	372.18	742.37	371.69	6
7	763.46	382.24			745.45	373.23	E	645.36	323.18	628.33	314.67	627.35	314.18	5
8	876.55	438.78			858.54	429.77	L	516.31	258.66	499.29	250.15			4
9	1004.61	502.81	987.58	494.29	986.60	493.80	Q	403.23	202.12	386.20	193.61			3
10	1132.67	566.84	1115.64	558.32	1114.66	557.83	Q	275.17	138.09	258.14	129.58			2
11							K	147.11	74.06	130.09	65.55			1

Appendix 5b: