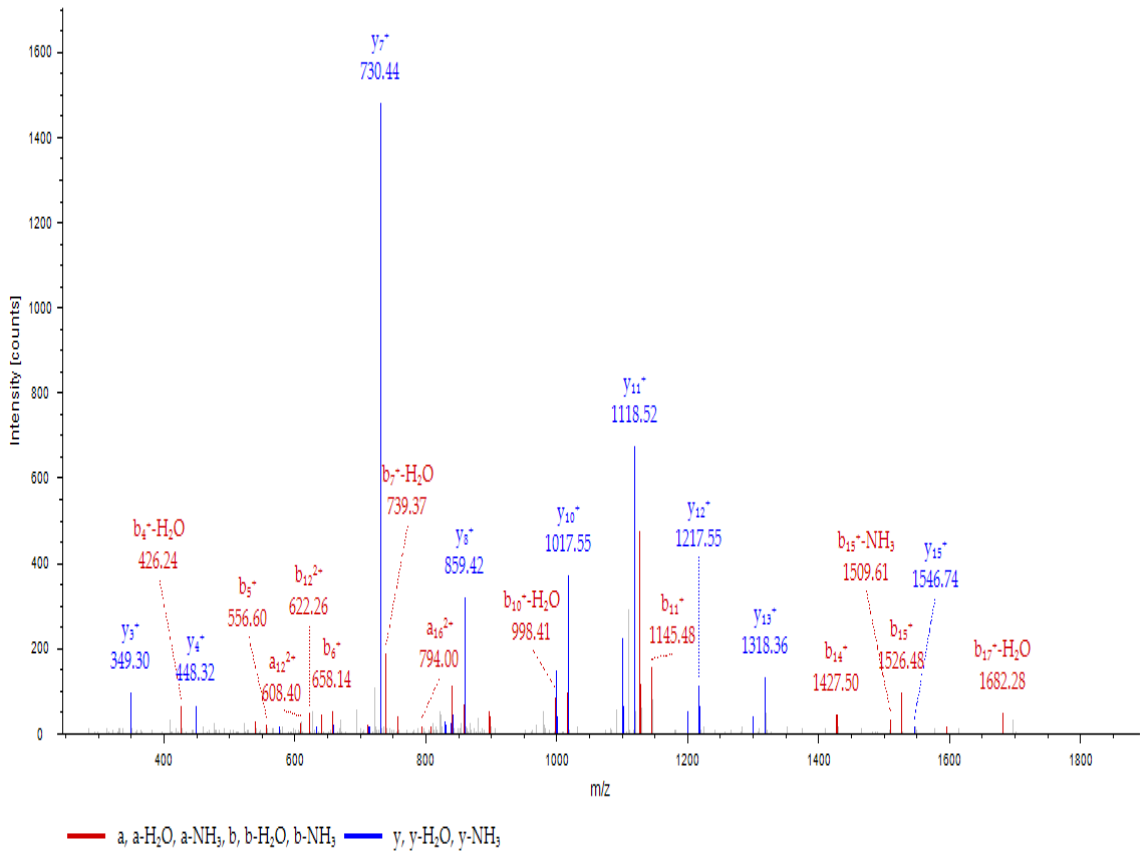


**Figure S6**

#1	b <sup>+</sup>	b <sup>2+</sup>	Seq.	y <sup>+</sup>	y <sup>2+</sup>	#2
1	88.03931	44.52329	S			18
2	201.12338	101.06533	I	1787.91346	894.46037	17
3	329.18196	165.09462	Q	1674.82939	837.91833	16
4	444.20891	222.60809	D	1546.77081	773.88904	15
5	557.29298	279.15013	L	1431.74386	716.37557	14
6	658.34066	329.67397	T	1318.65979	659.83353	13
7	757.40908	379.20818	V	1217.61211	609.30969	12
8	858.45676	429.73202	T	1118.54369	559.77548	11
9	915.47823	458.24275	G	1017.49601	509.25164	10
10	1016.52591	508.76659	T	960.47454	480.74091	9
11	1145.56851	573.28789	E	859.42686	430.21707	8
12	1242.62128	621.81428	P	730.38426	365.69577	7
13	1299.64275	650.32501	G	633.33149	317.16938	6
14	1427.70133	714.35430	Q	576.31002	288.65865	5
15	1526.76975	763.88851	V	448.25144	224.62936	4
16	1613.80178	807.40453	S	349.18302	175.09515	3
17	1700.83381	850.92054	S	262.15099	131.57913	2
18			R	175.11896	88.06312	1

**SIQDLTVTGTEPGQVSSR**  
 (unphosphorylated form)

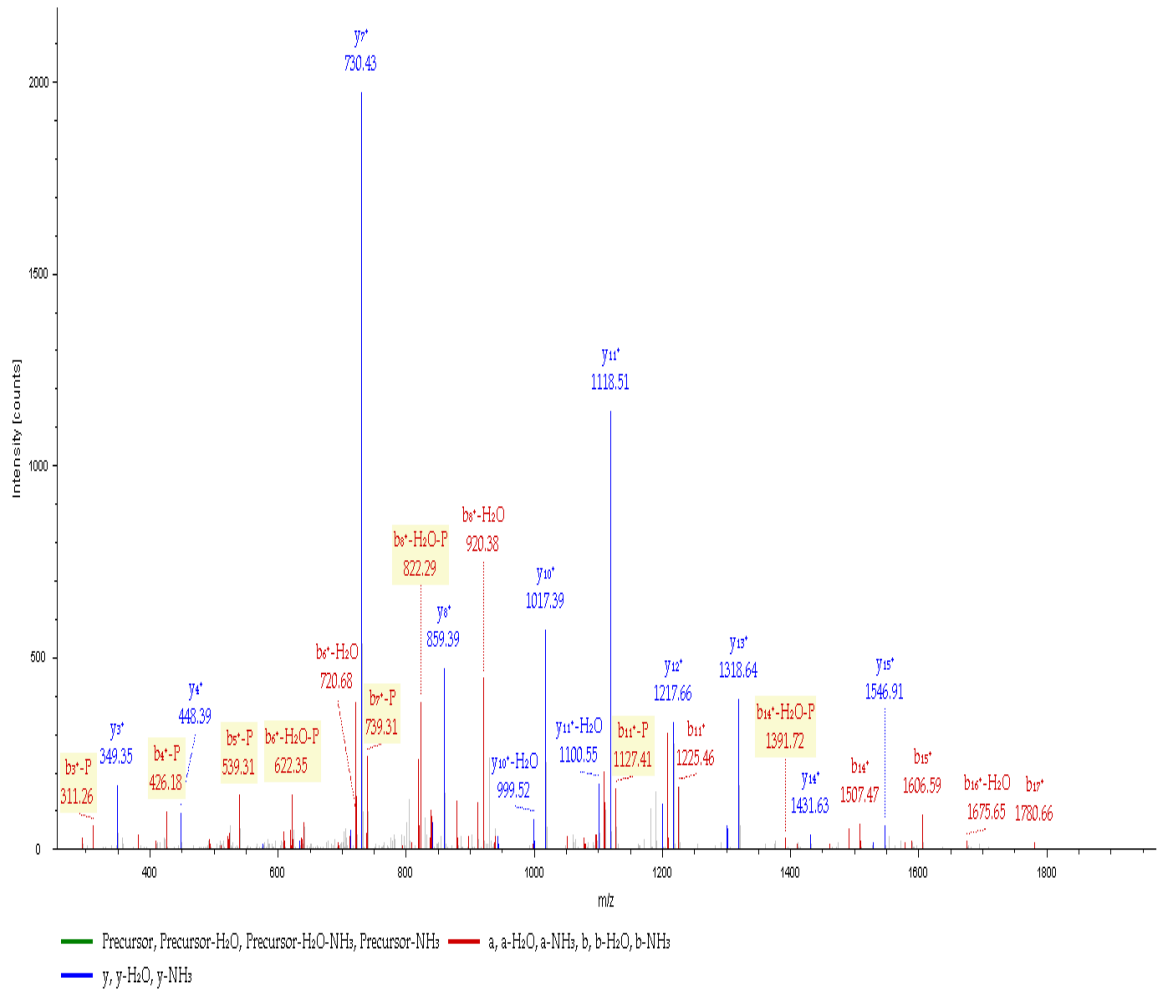
m/z	Charge	$\Delta M$ (ppm)	Mascot Ion Score	Sequest Xcorr
937.98	2+	5.40	62	4.23



**S<sub>p</sub>IQDLTVTGTGTEPGQVSSR**  
(phosphorylated form)

m/z	Charge	ΔM (ppm)	Mascot Ion Score	Sequest Xcorr
977.96	2+	4.92	57	4.73

#1	b <sup>-</sup>	b <sup>2+</sup>	Seq.	y <sup>+</sup>	y <sup>2+</sup>	#2
1	168.00564	84.50646	S-Phospho			18
2	281.08971	141.04849	I	1787.91346	894.46037	17
3	409.14829	205.07778	Q	1674.82939	837.91833	16
4	524.17524	262.59126	D	1546.77081	773.88904	15
5	637.25931	319.13329	L	1431.74386	716.37557	14
6	738.30699	369.65713	T	1318.65979	659.83353	13
7	837.37541	419.19134	V	1217.61211	609.30969	12
8	938.42309	469.71518	T	1118.54369	559.77548	11
9	995.44456	498.22592	G	1017.49601	509.25164	10
10	1096.49224	548.74976	T	960.47454	480.74091	9
11	1225.53484	613.27106	E	859.42686	430.21707	8
12	1322.58761	661.79744	P	730.38426	365.69577	7
13	1379.60908	690.30818	G	633.33149	317.16938	6
14	1507.66766	754.33747	Q	576.31002	288.65865	5
15	1606.73608	803.87168	V	448.25144	224.62936	4
16	1693.76811	847.38769	S	349.18302	175.09515	3
17	1780.80014	890.90371	S	262.15099	131.57913	2
18			R	175.11896	88.06312	1



**Figure S6. Ser412 on TAK1 was identified as a BLM-induced phosphorylation site by MS/MS. The MS/MS spectra of both phosphorylated and unphosphorylated sequence (SIQDLTVTGTGTEPGQVSSR) were shown.**