

A

A

[illegible]

B

hGH

[illegible]

AUT-hGH

[illegible]

Supple Table S1

Ubiquitination at K141 of hGH in serum

#1	b ⁺	b ²⁺	Seq.	y ⁺	y ²⁺	#2
1	88.03930	44.52329	S			21
2	187.10772	94.05750	V	2289.13975	1145.07351	20
3	334.17613	167.59170	F	2190.07134	1095.53931	19
4	405.21325	203.11026	A	2043.00292	1022.00510	18
5	519.25617	260.13173	N	1971.96581	986.48654	17
6	606.28820	303.64774	S	1857.92288	929.46508	16
7	719.37227	360.18977	L	1770.89086	885.94907	15
8	818.44068	409.72398	V	1657.80679	829.40703	14
9	981.50401	491.25564	Y	1558.73838	779.87283	13
10	1038.52547	519.76637	G	1395.67505	698.34116	12
11	1109.56259	555.28493	A	1338.65359	669.83043	11
12	1196.59461	598.80095	S	1267.61647	634.31187	10
13	1311.62156	656.31442	D	1180.58444	590.79586	9
14	1398.65359	699.83043	S	1065.55750	533.28239	8
15	1512.69651	756.85189	N	978.52547	489.76637	7
16	1611.76493	806.38610	V	864.48254	432.74491	6
17	1774.82826	887.91777	Y	765.41413	383.21070	5
18	1889.85520	945.43124	D	602.35080	301.67904	4
19	2002.93926	1001.97327	L	487.32386	244.16557	3
20	2116.02333	1058.51530	L	374.23980	187.62354	2
21			K-GG	261.15573	131.08150	1

Supple Table S2

Lysine(K) residue position	The substitutes of hGH with lysine converted to arginine
67	pCS4-Flag-hGH (K67R)
141	pCS4-Flag-hGH (K141R)
166	pCS4-Flag-hGH (K166R)