

**Supplemental figure legends**

**Supplemental figure 1a-f:** Overview of image cytometrie, CGH, and SKY evaluation of analyzed colorectal cancer cell lines LoVo, DLD-1, HCT116, HT-29, COLO 201, and T84. n.a., not available.

**Supplemental figure 2:** Screenshot from the PDQuest analysis software (a) and representative gel images of a diploid and an aneuploid cell line (b). The inter-individual expression of HDAC2, CAPZA1, and TXNL1 is shown through representative match-set members. The two sub-entities are highlighted in red (aneuploid) and blue (diploid).

**Supplemental figure 3:** Expression of aneuploid and diploid cell lines for significant proteins. Dots represent median expression of replicates for a single cell line and lines show weighted mean of aneuploid and diploid cell lines.

**Supplemental figure 4:** IPA network 2 (Score 23) of 10 proteins differentially expressed between diploid and aneuploid colorectal cell lines. Red highlighted proteins are higher expressed in the aneuploid group, green ones are lower expressed in the aneuploid group. Please note the overall association of this network with functions (FX) and canonical pathways (CP) related to cancer, polypliodization and senescence. This network overlaps with network 1 (blue). Proteins accompanied by red and green ovals were prone to Western Blot evaluation with the red one reaching significance.

**Supplemental figure 5:** Western Blots analysis of GNAS (a) and PRDX2 (b) expression in colorectal cell lines including non-specific bands for the respective protein. Red frames mark the specific band of the proteins that was used for evaluation. None of the unspecific bands showed significant differences between diploid (LoVo, DLD-1, HCT116) and aneuploid (HT-29, COLO 201, T84, Caco-2) cell lines.

**Supplemental figure 6:** Tissue-Microarray based immunohistochemical evaluation of HDAC2, CAPZA1, and TXNL1 comparing all sporadic colorectal carcinoma specimens versus adjacent normal mucosa. Immunoreactivity was scored with “0” showing no positivity, “1” presenting up to 20% immunopositive cells, “2” up to 50% and “3” above 50% stained cells. Barplots of the TMA analysis confirmed HDAC2 and TXNL1 as significantly (\*) differentially expressed proteins between colorectal carcinoma and normal mucosa.

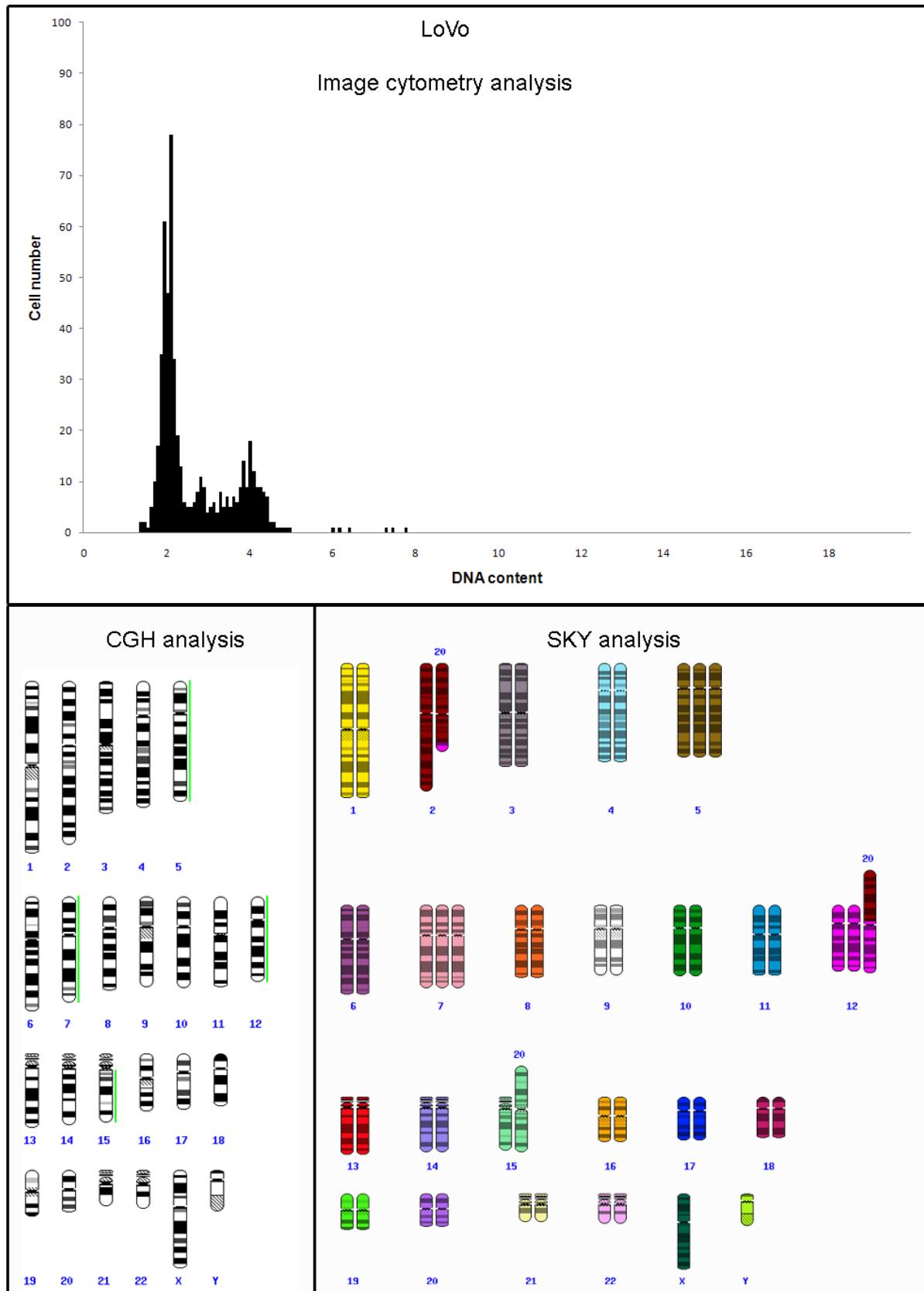
**Supplemental figure 7:** Tissue-Microarray based immunohistochemical evaluation of HDAC2, CAPZA1, and TXNL1 comparing diploid and aneuploid sporadic colorectal carcinoma specimens versus adjacent normal mucosa. Immunoreactivity was scored with “0” showing no positivity, “1” presenting up to 20% immunopositive cells, “2” up to 50% and “3” above 50% stained cells.

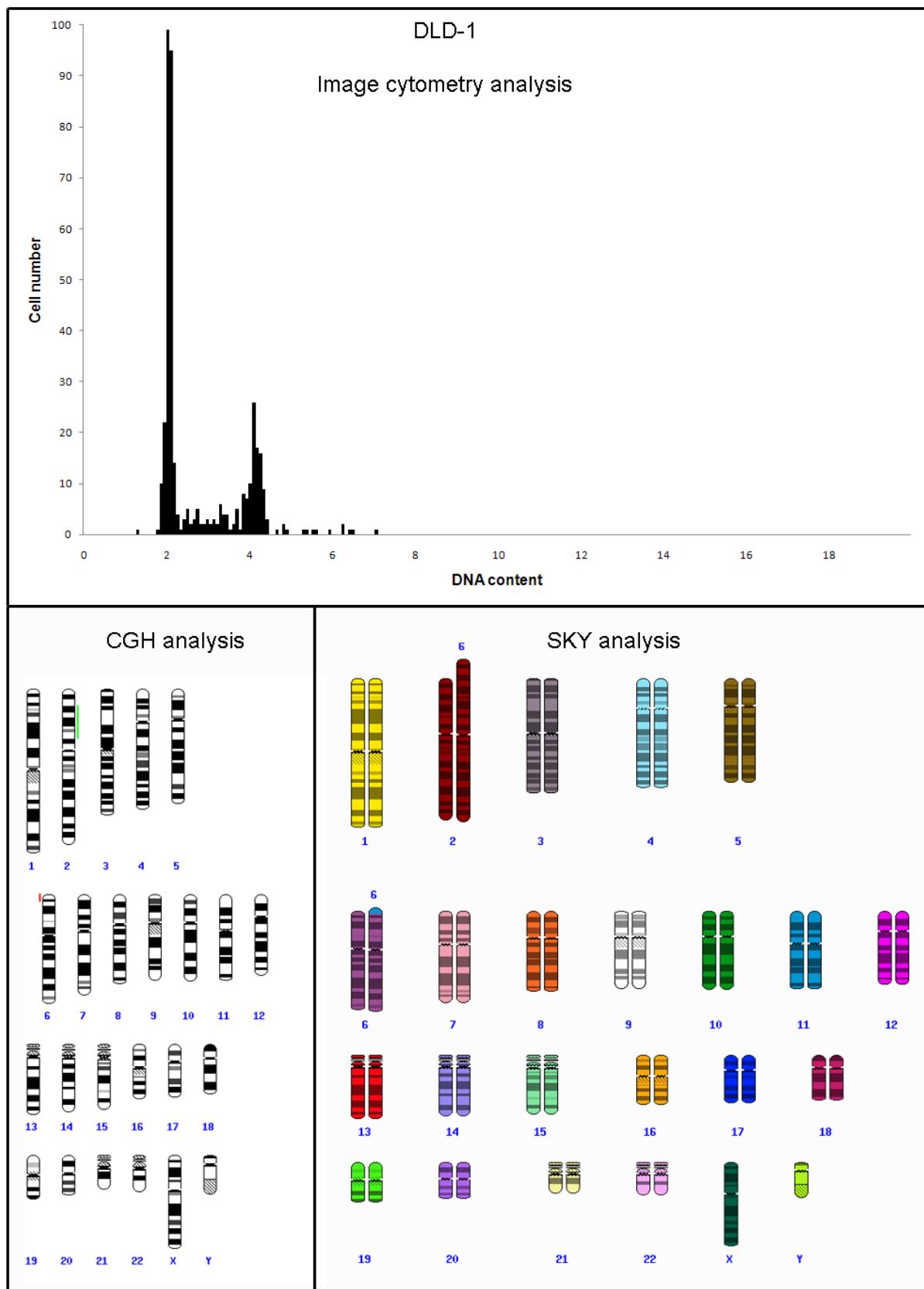
**Supplemental figure 8a-y:** Annotated spectra of all identified protein spots. Please notice that supplemental figure 6n is compromised of two identities (DCPS and UBP1) that were pooled by experimental mistake.

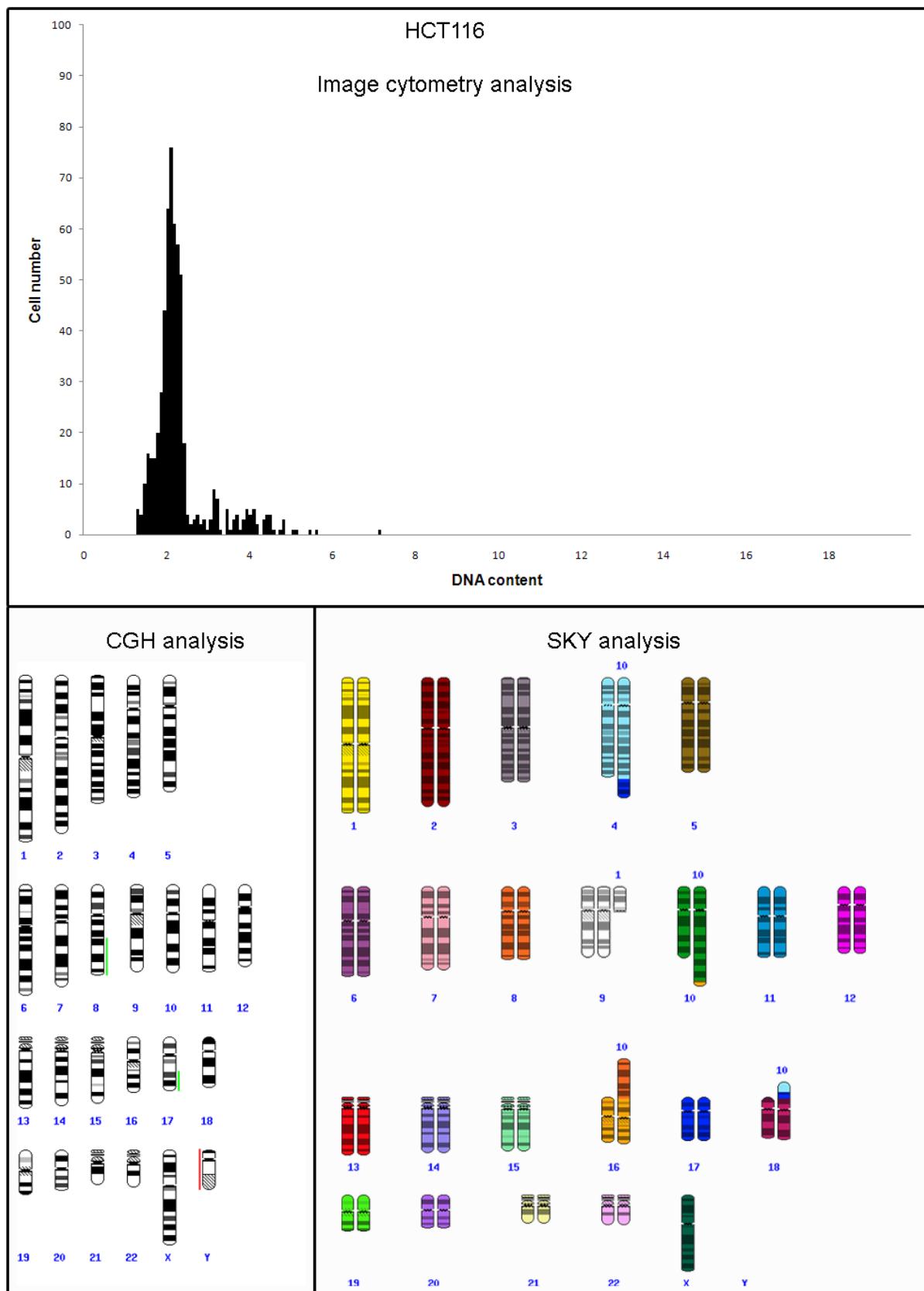
**Supplemental table legends**

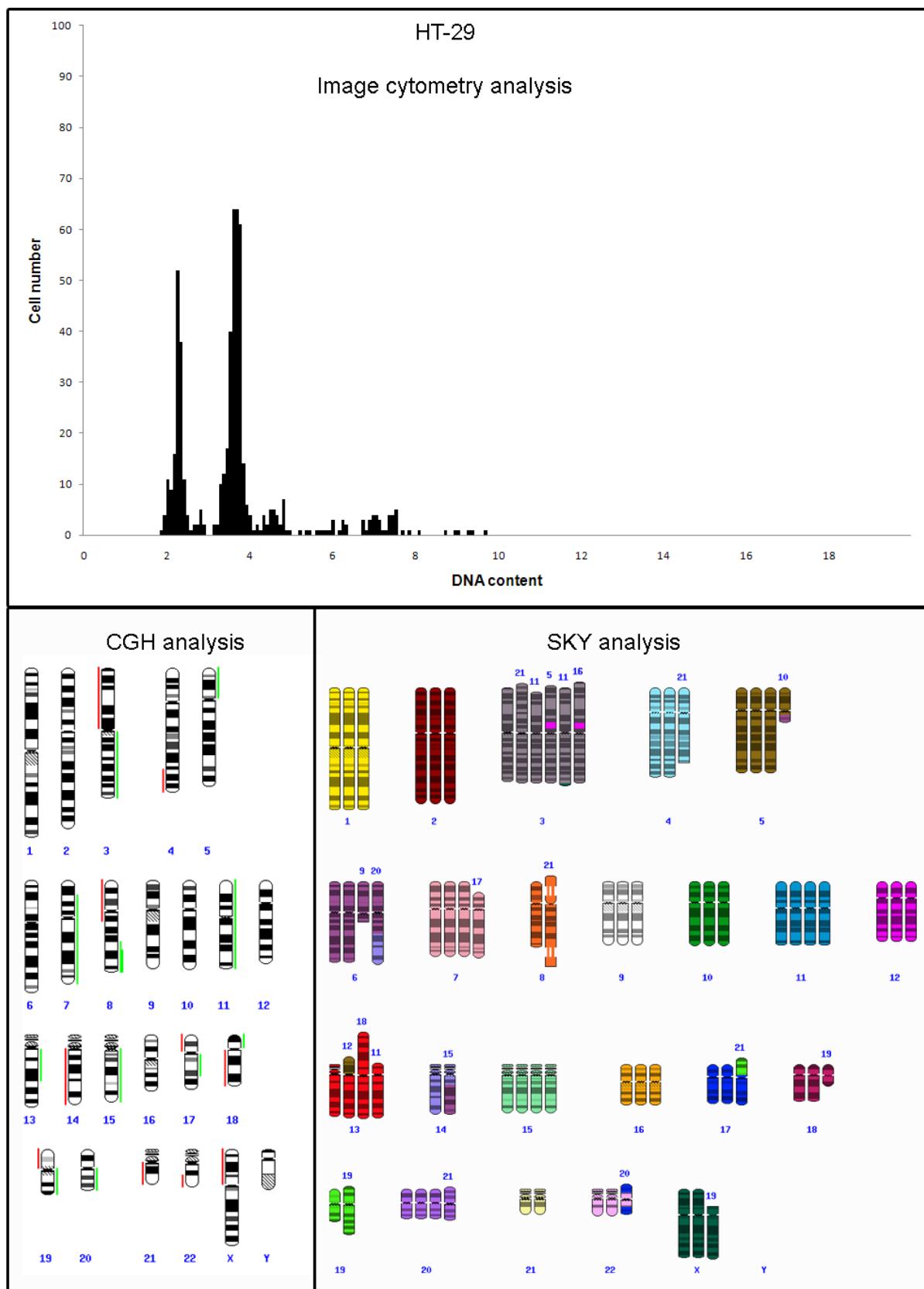
**Supplemental table 1:** Details on cell culture.

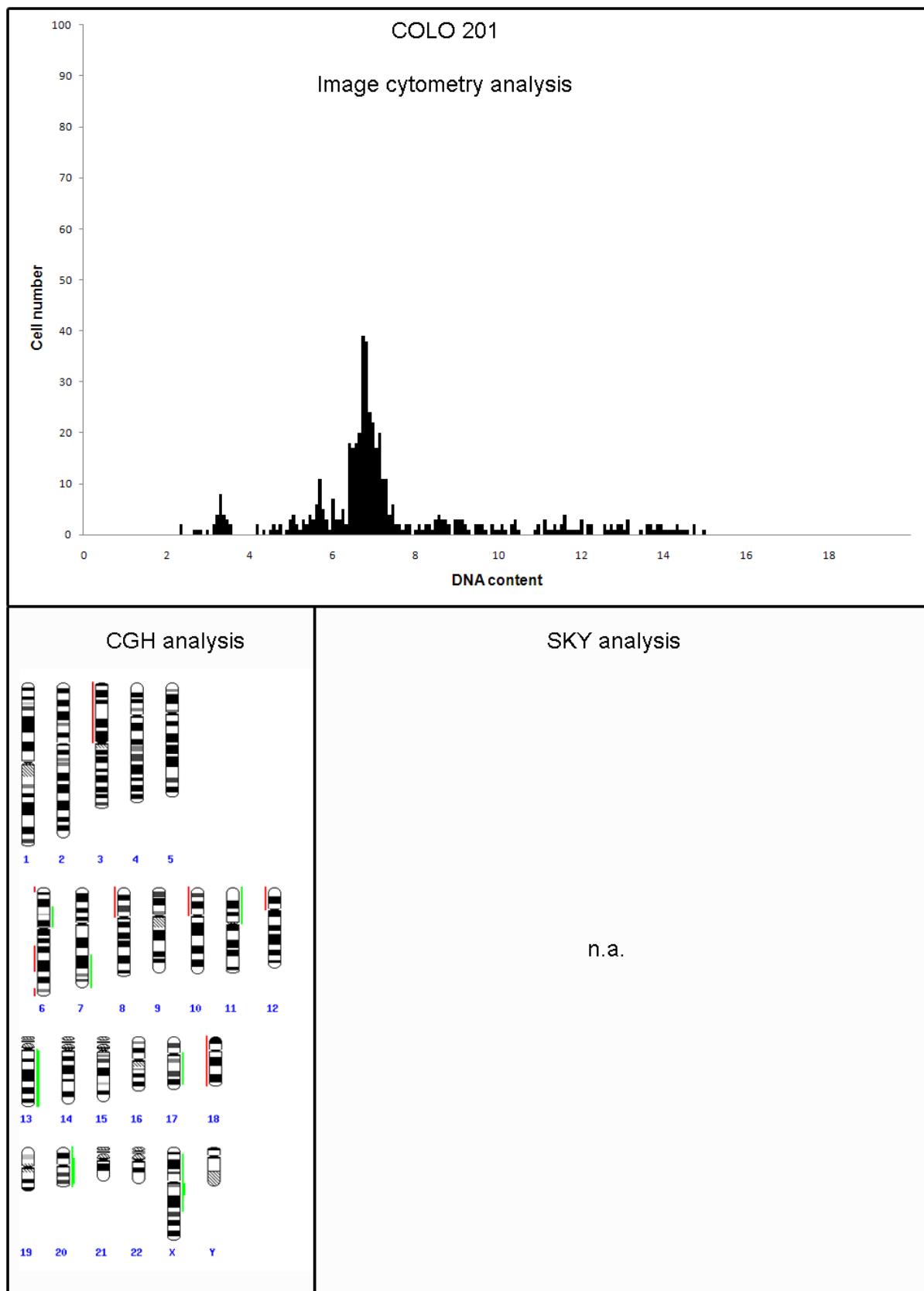
**Supplemental table 2a-e:** Peak lists of all identified protein spots. Matched peptides are marked in red with peptide assignment in brackets. Methionine oxidation is labeled with Mox. Please notice that supplemental table 2e includes the peak list of DCPS and UBP1 that were pooled by experimental mistake. Here, matched peptides of DCPS are highlighted in green and matched peptides of UBP1 are highlighted in red.

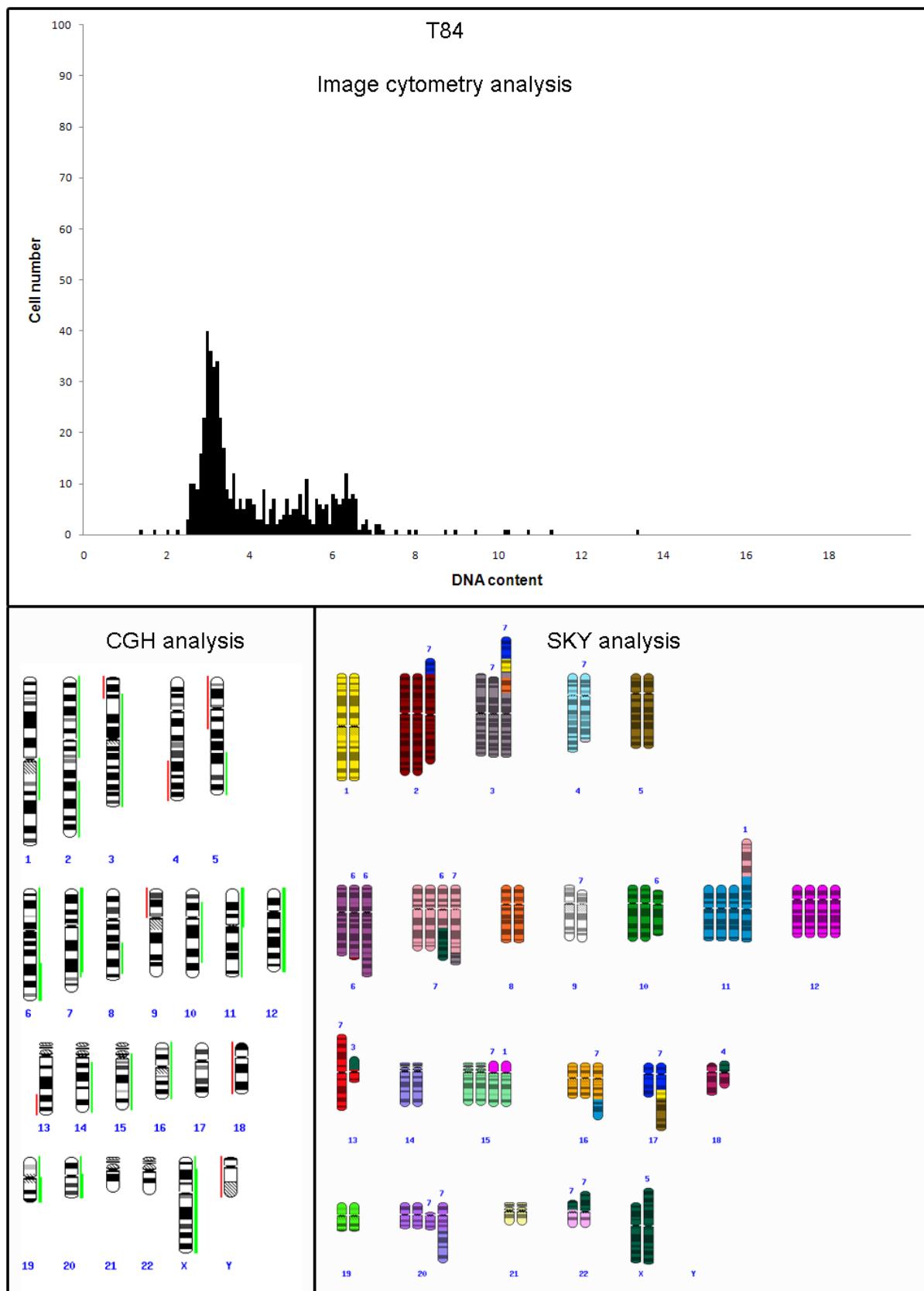
**Supplemental figures****Supplemental figure 1a**

**Supplemental figure 1b**

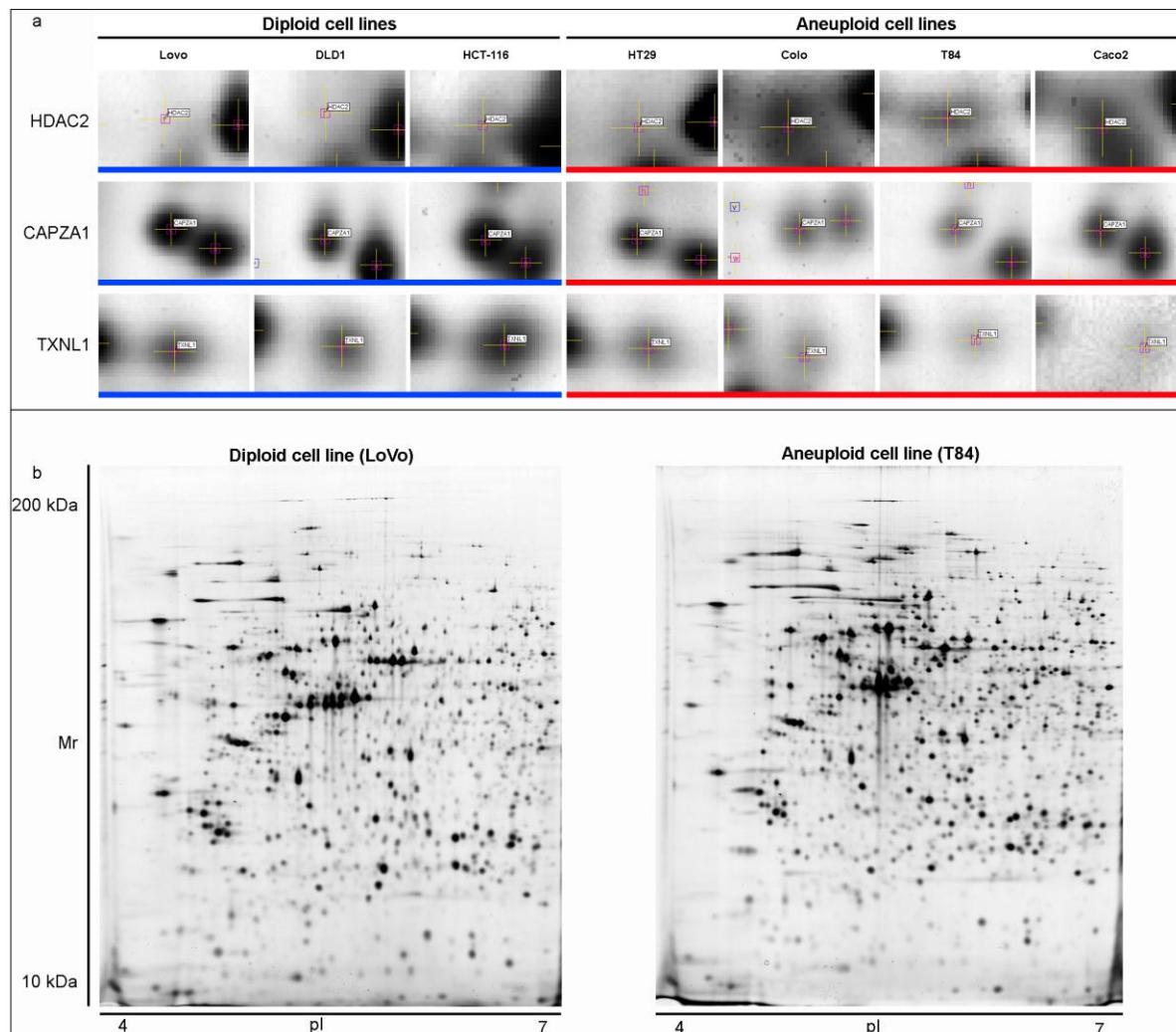
**Supplemental figure 1c**

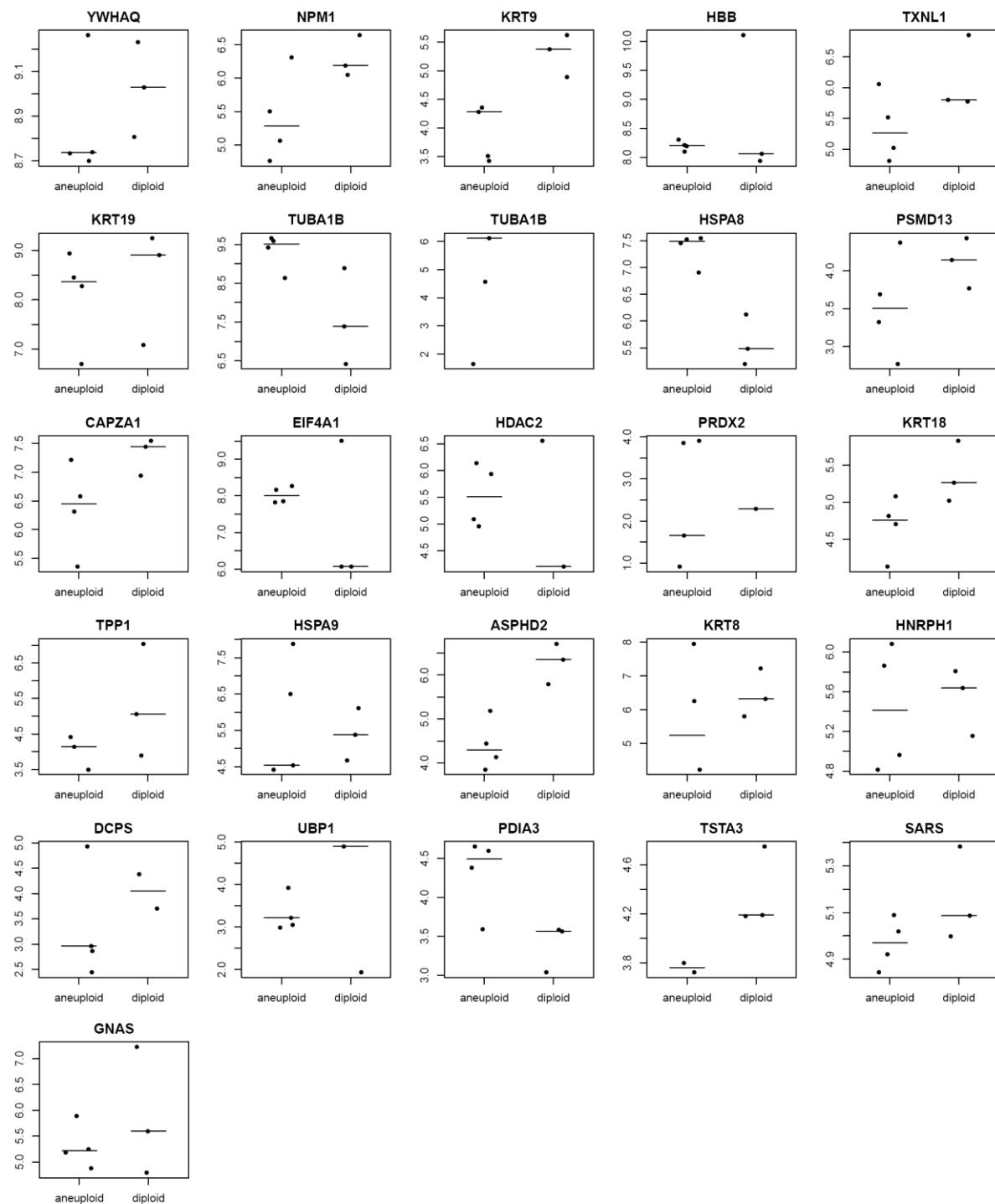
**Supplemental figure 1d**

**Supplemental figure 1e**

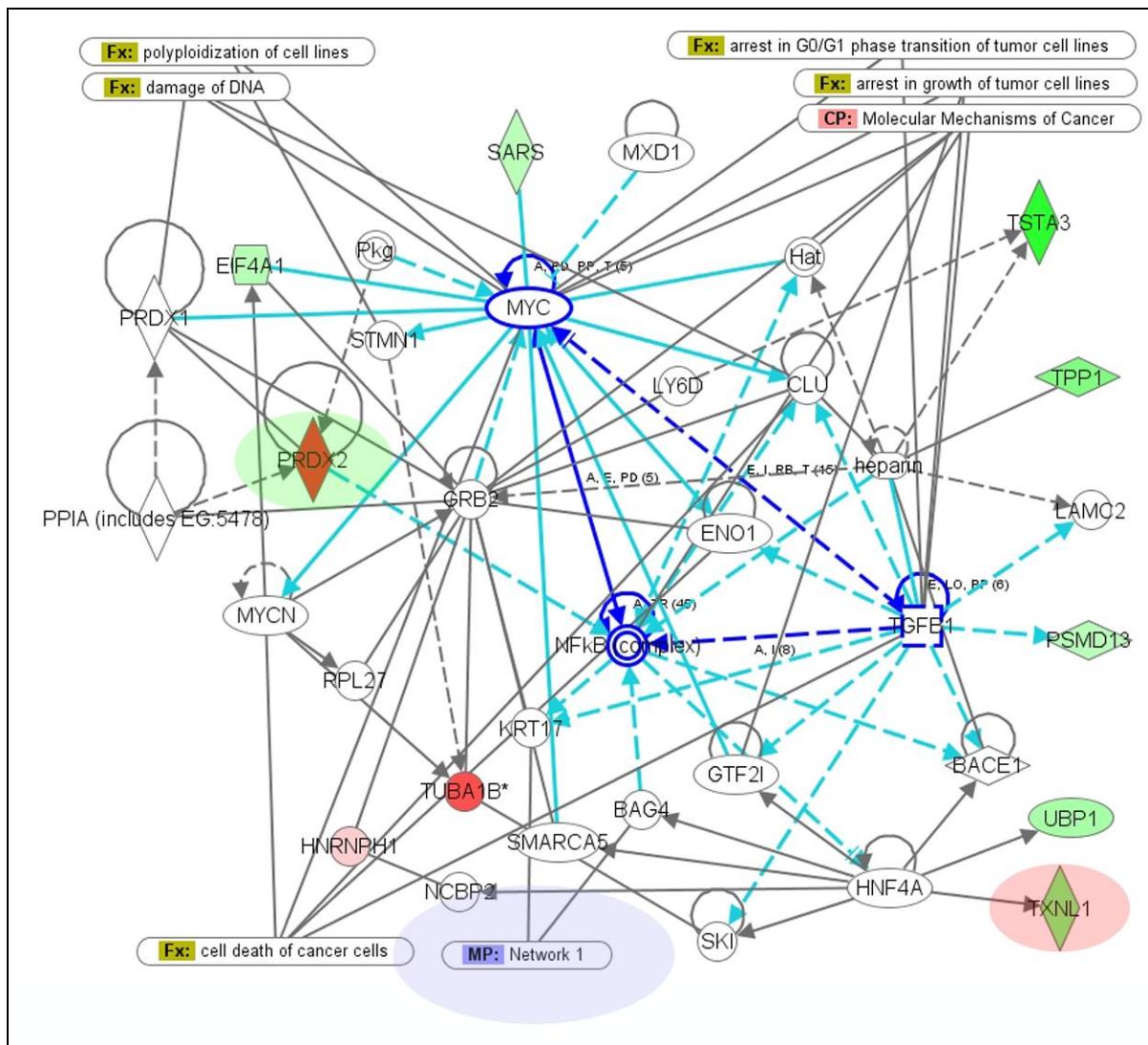
**Supplemental figure 1f**

### Supplemental figure 2



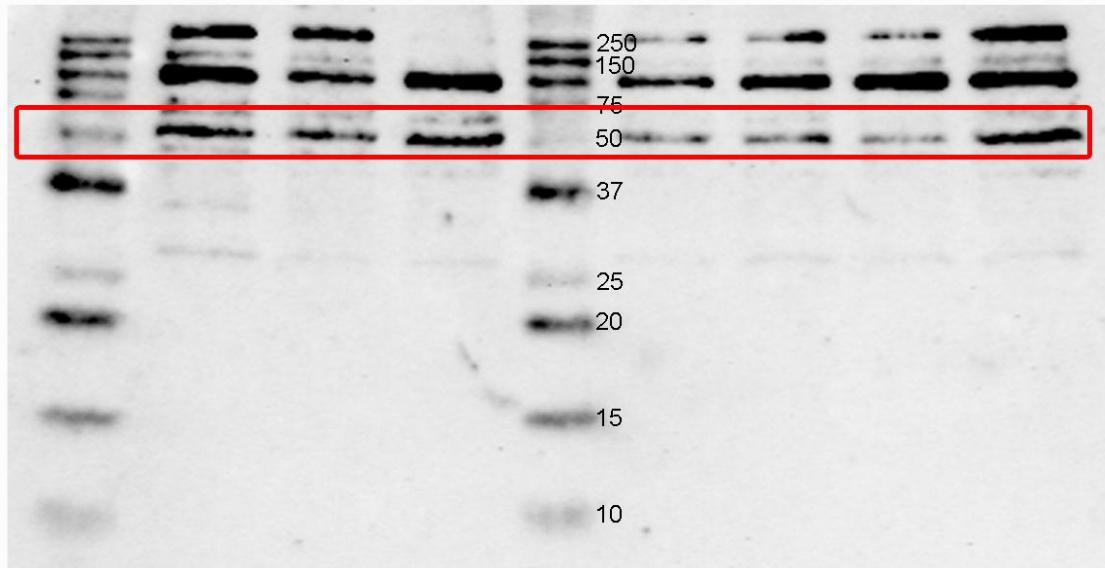
**Supplemental figure 3**

Supplemental figure 4

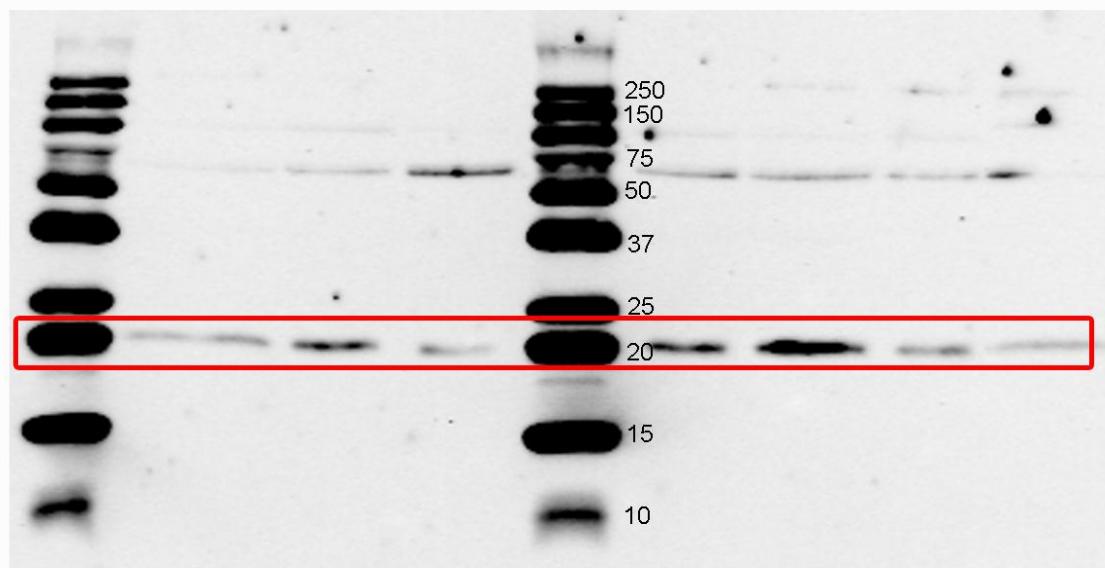


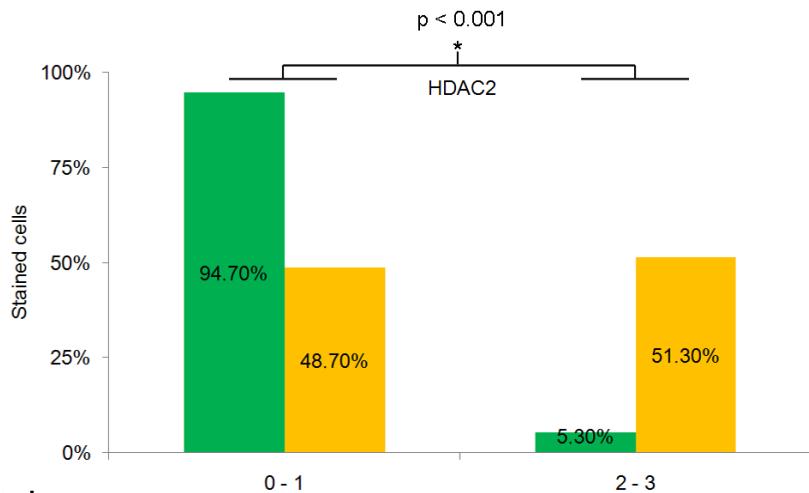
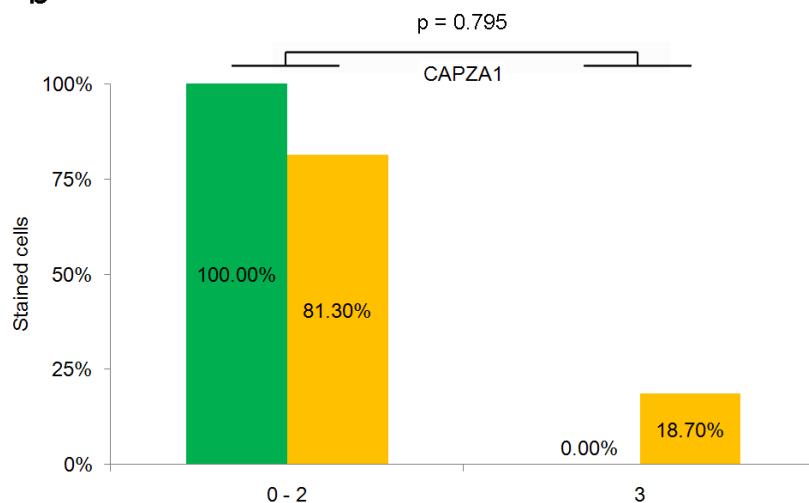
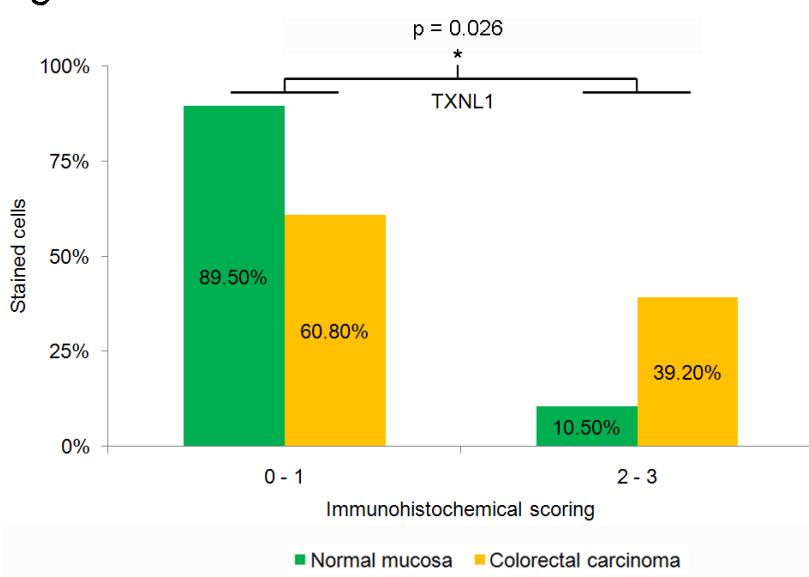
**Supplemental figure 5****a**

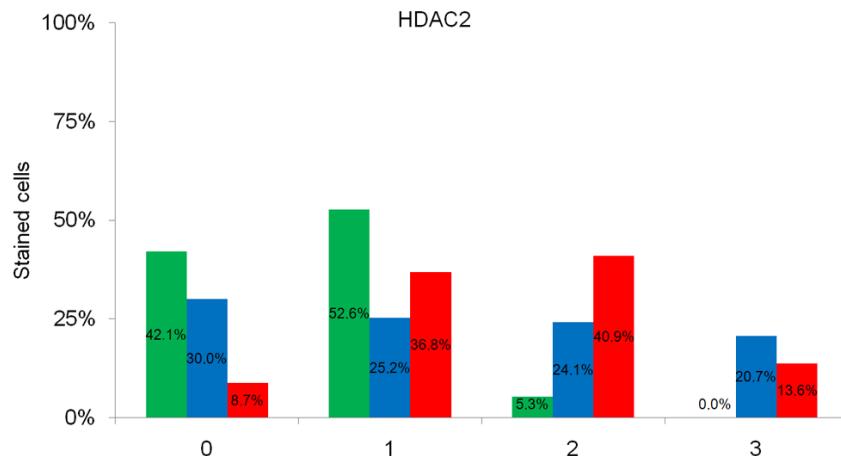
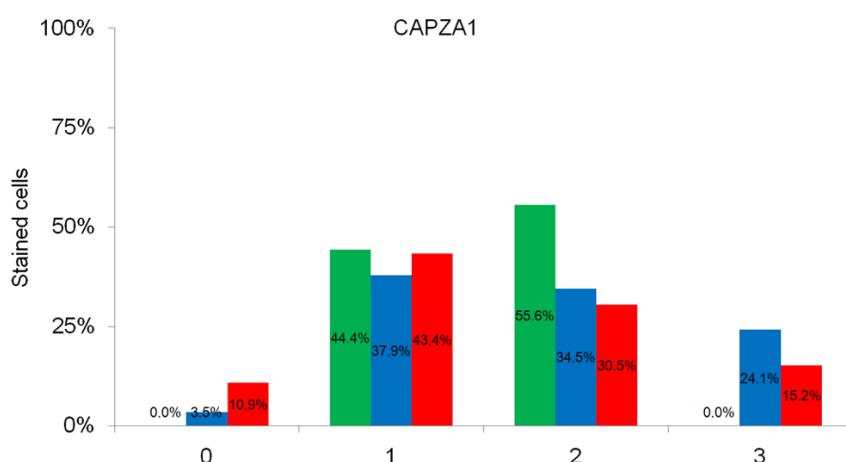
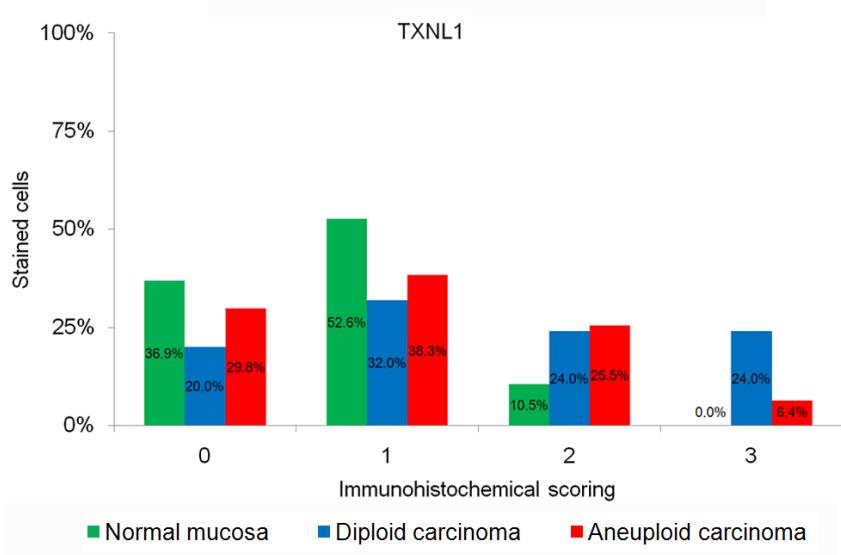
Marker LoVo DLD-1 HCT116 Marker HT-29 COLO T84 Caco-2

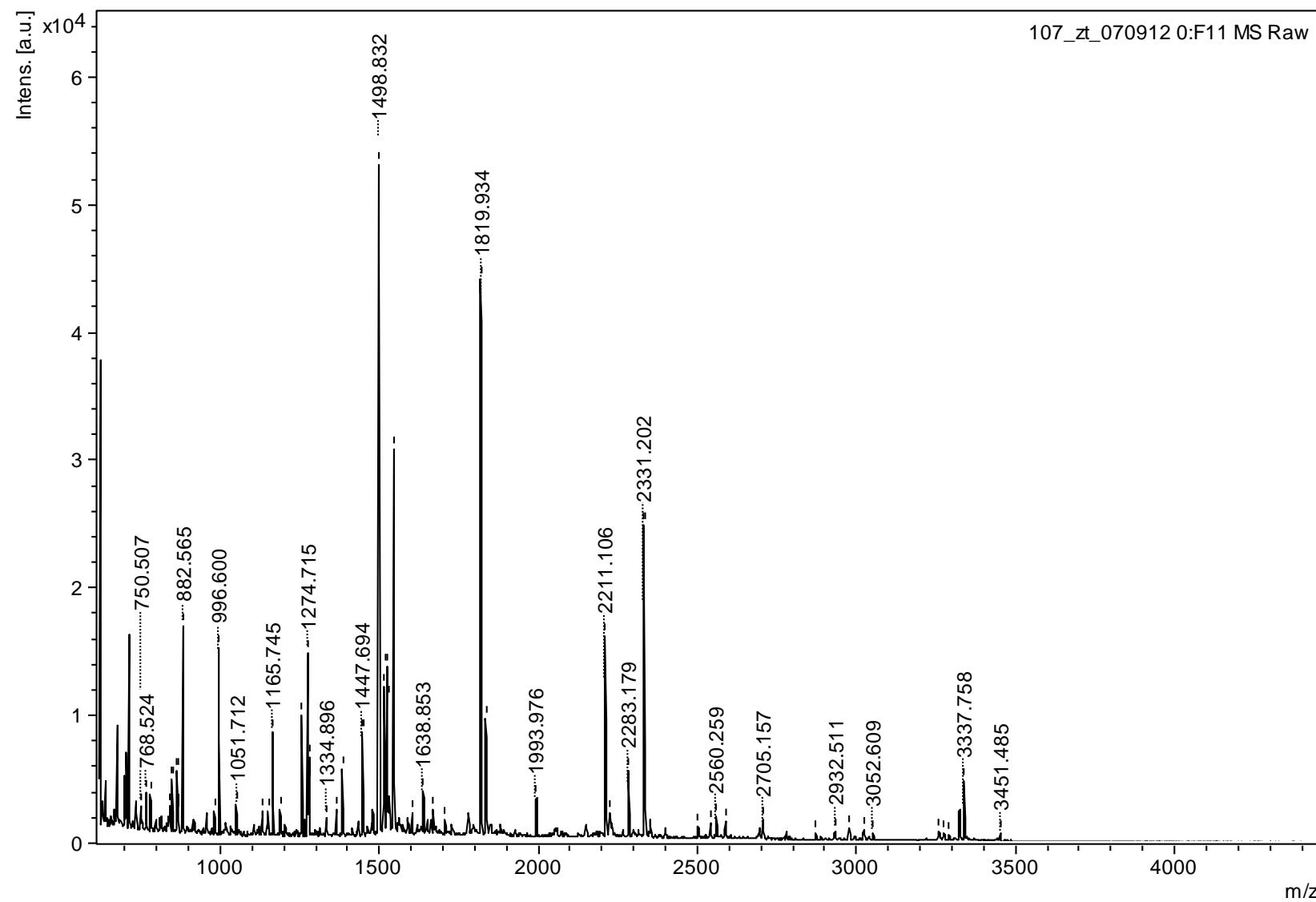
**b**

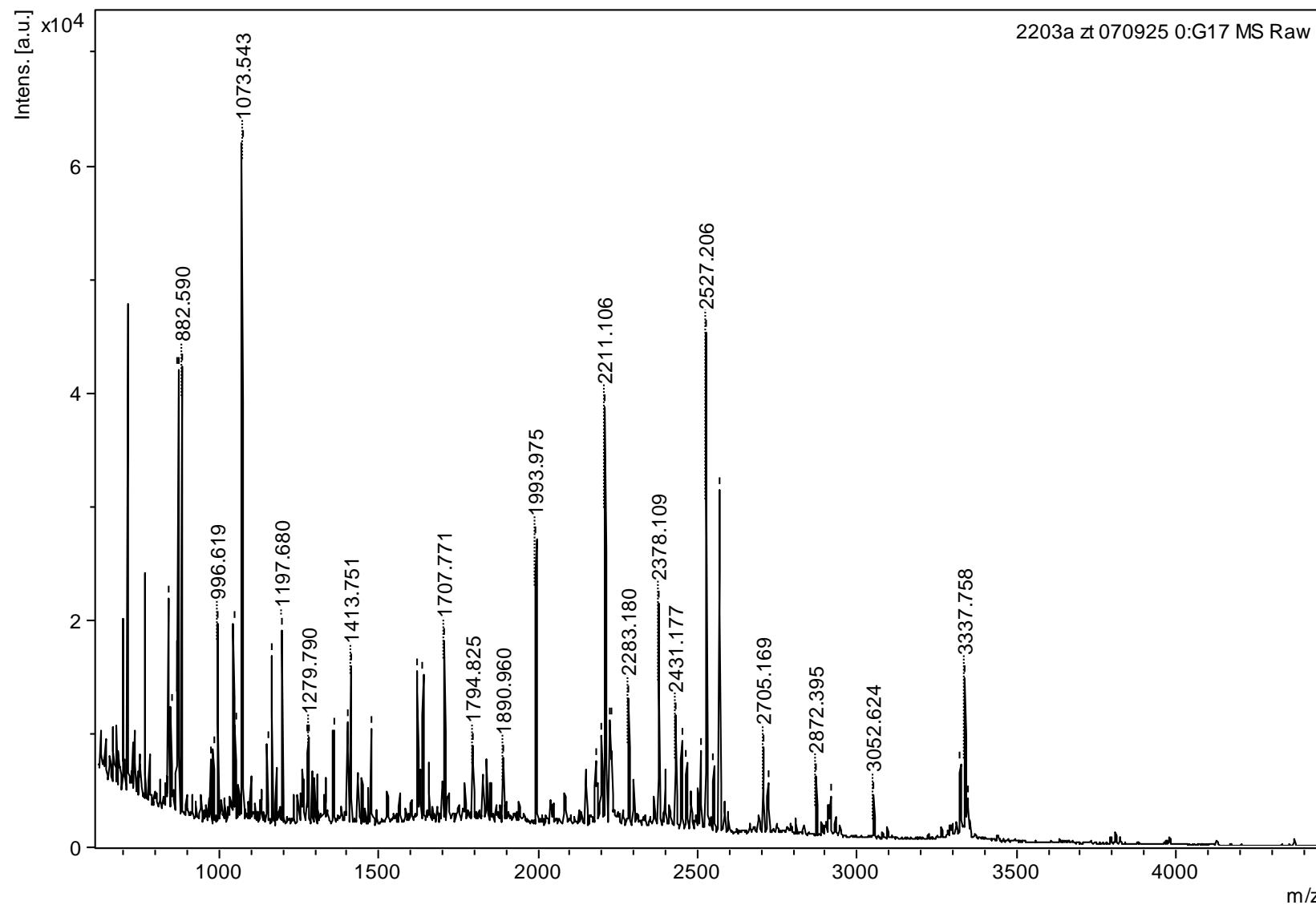
Marker LoVo DLD-1 HCT116 Marker HT-29 COLO T84 Caco-2

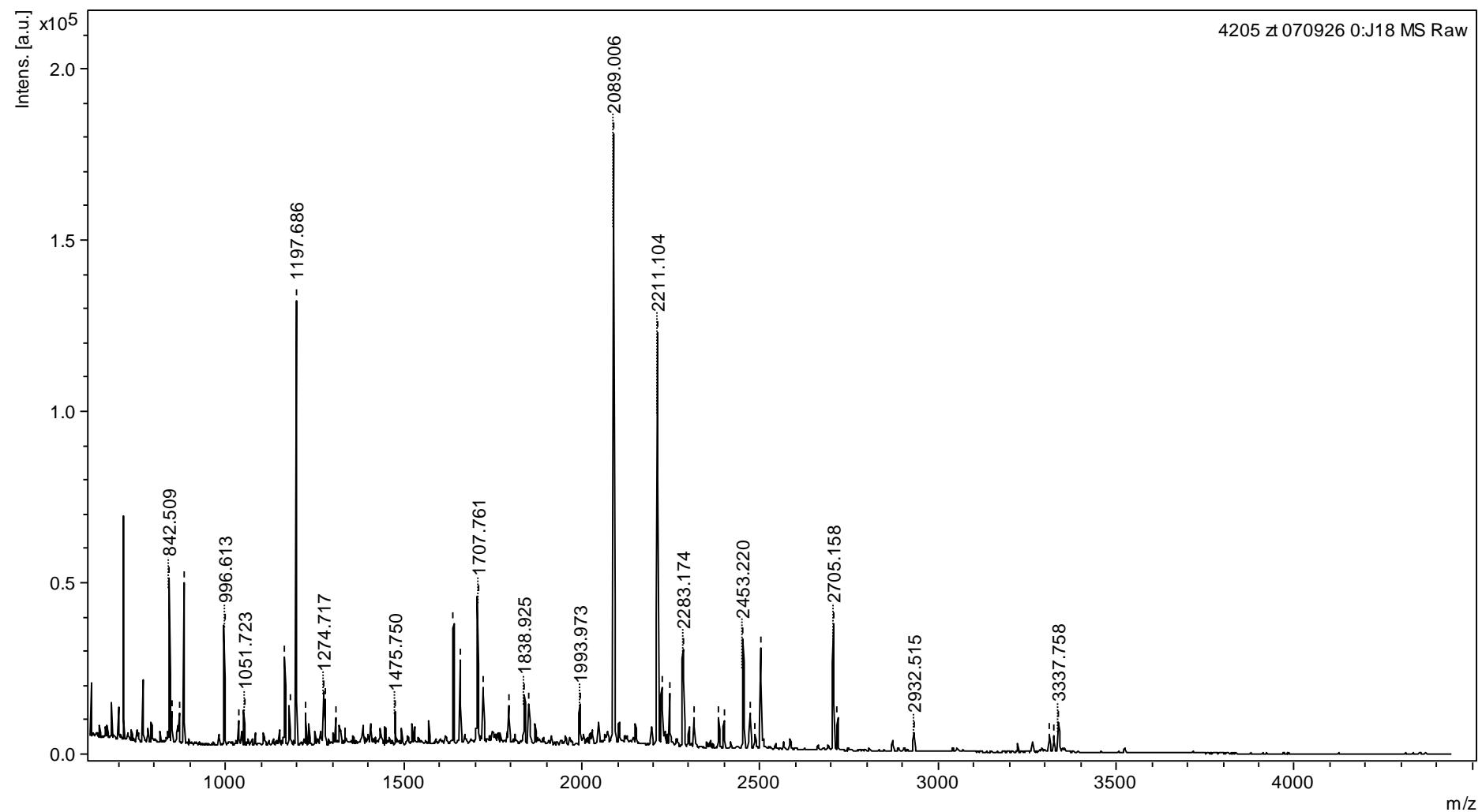


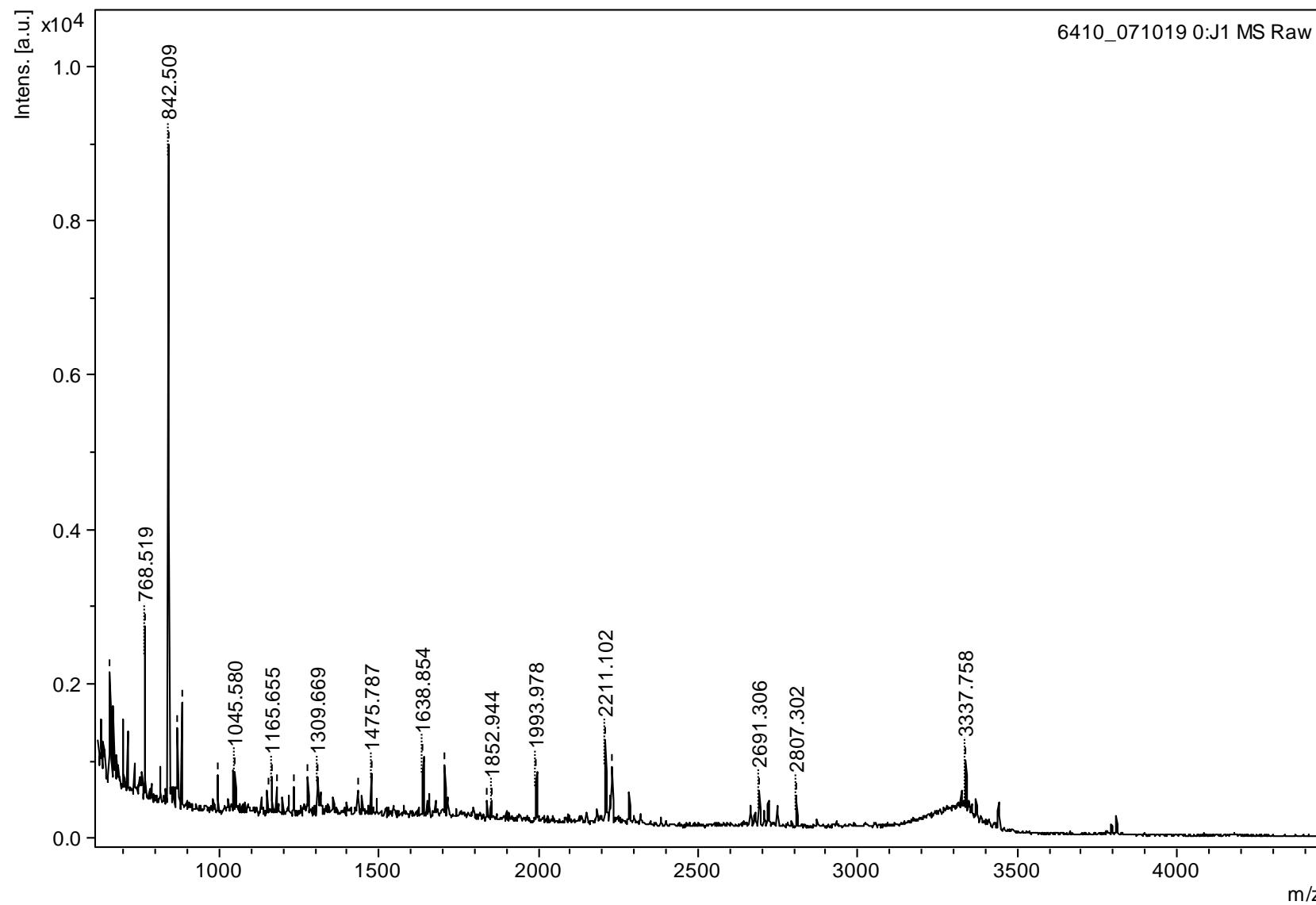
**Supplemental figure 6****a****b****c**

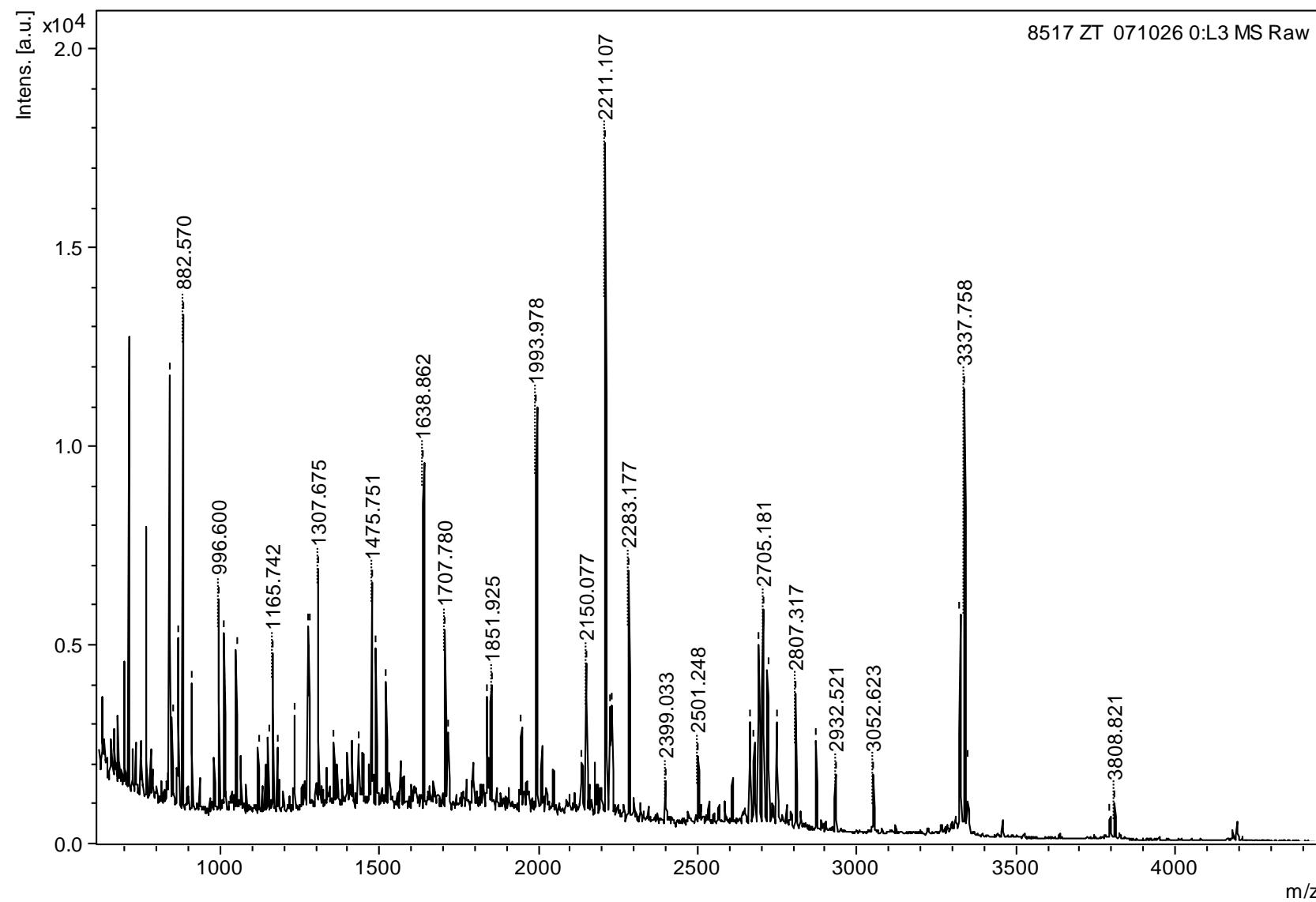
**Supplemental figure 7****a****b****c**

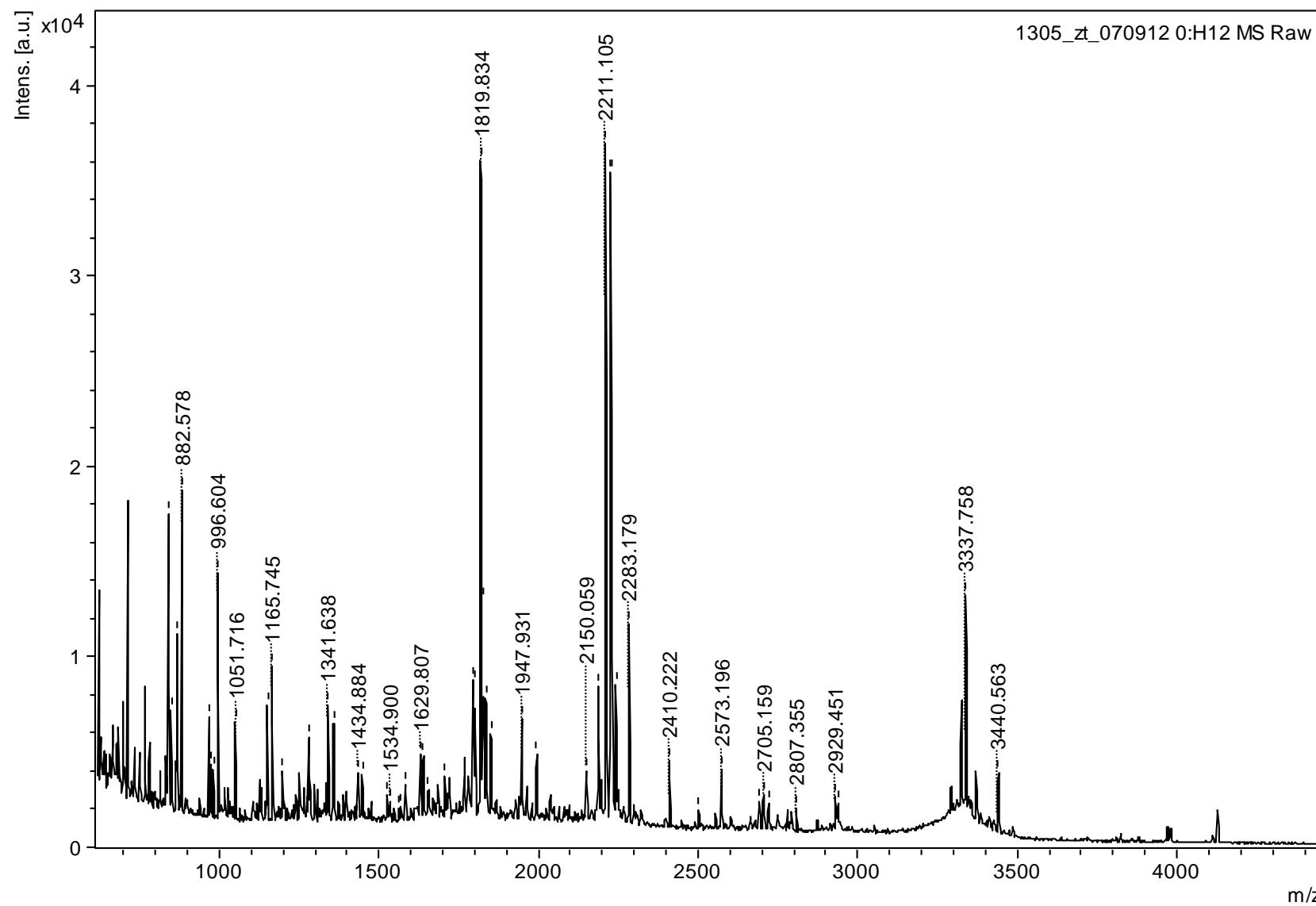
**Supplemental figure 8a: 14-3-3, NP\_006752**

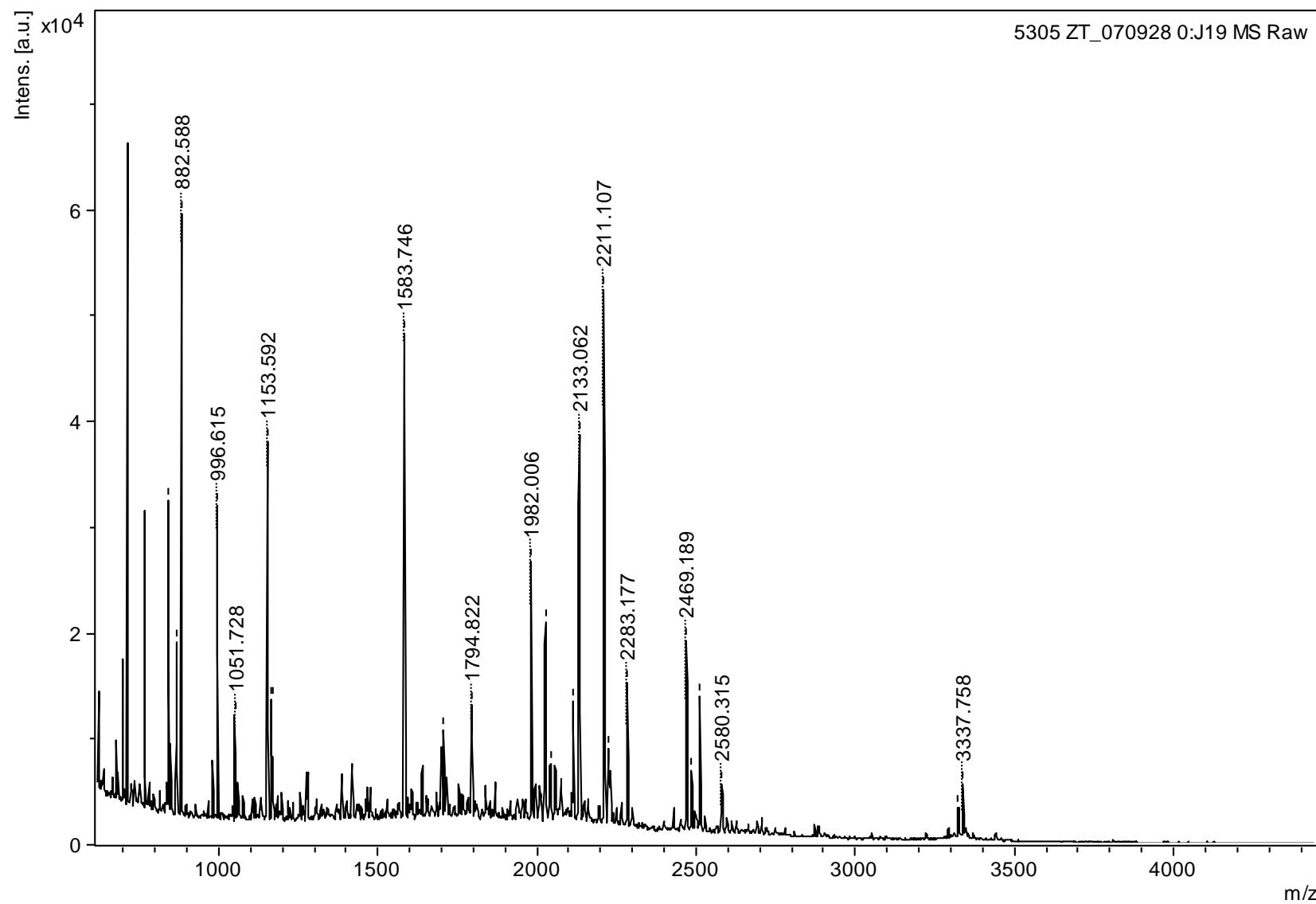
**Supplemental figure 8b: Thioredoxin-like 1, NP\_004777**

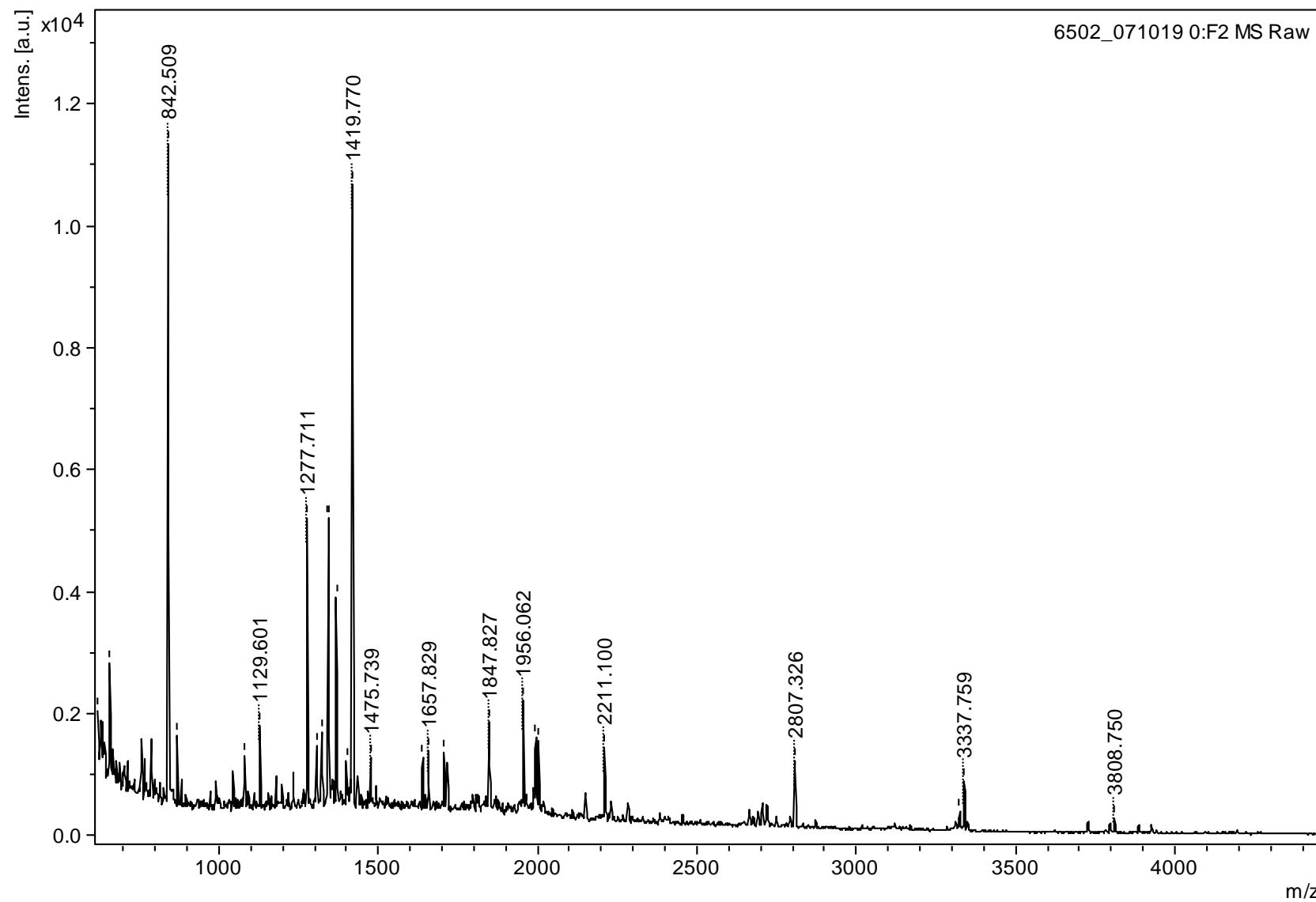
**Supplemental figure 8c: Capping protein muscle Z-line alpha 1, NP\_006126**

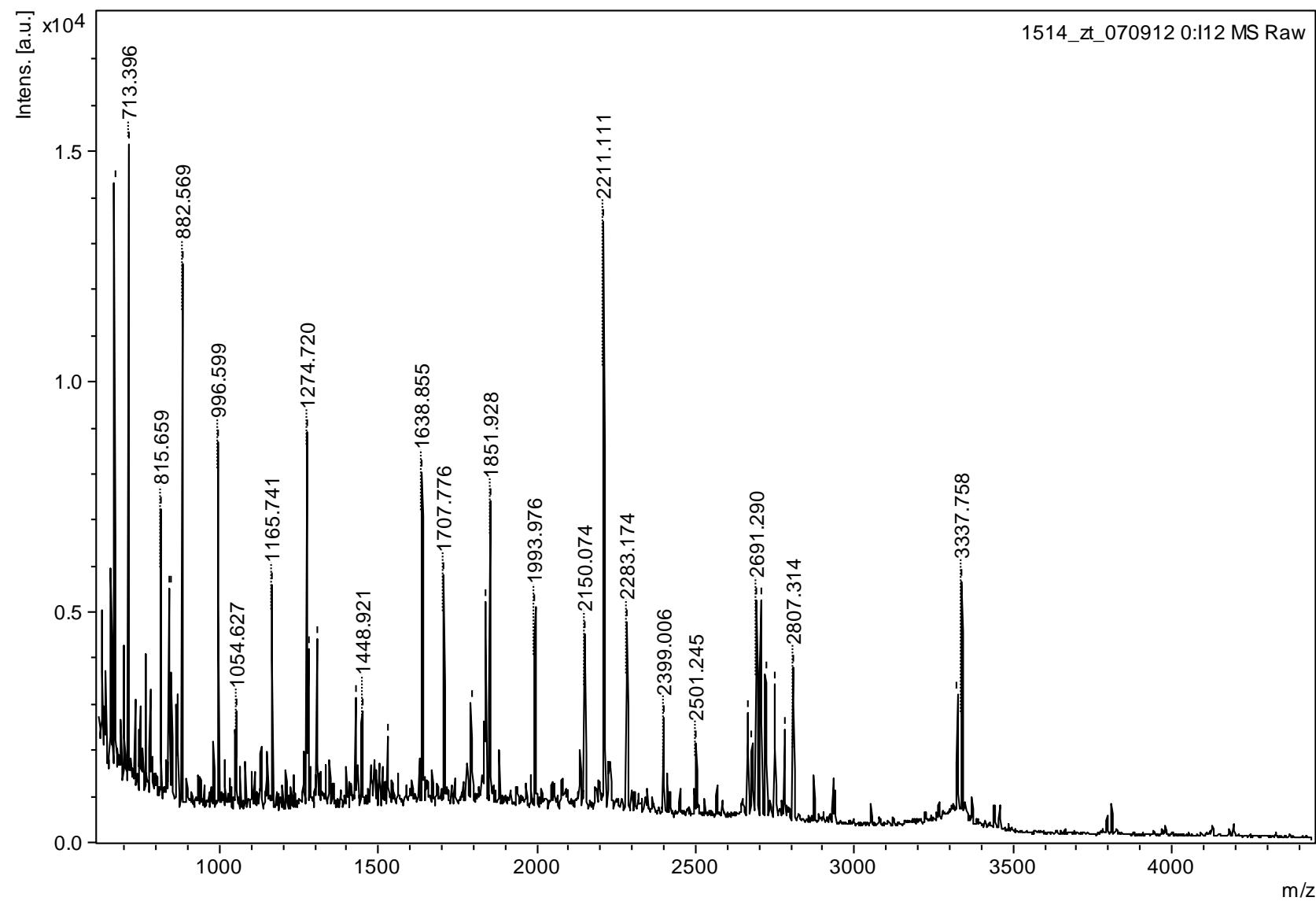
**Supplemental figure 8d: Aspartate beta-hydroxylase domain containing 2, NP\_065170**

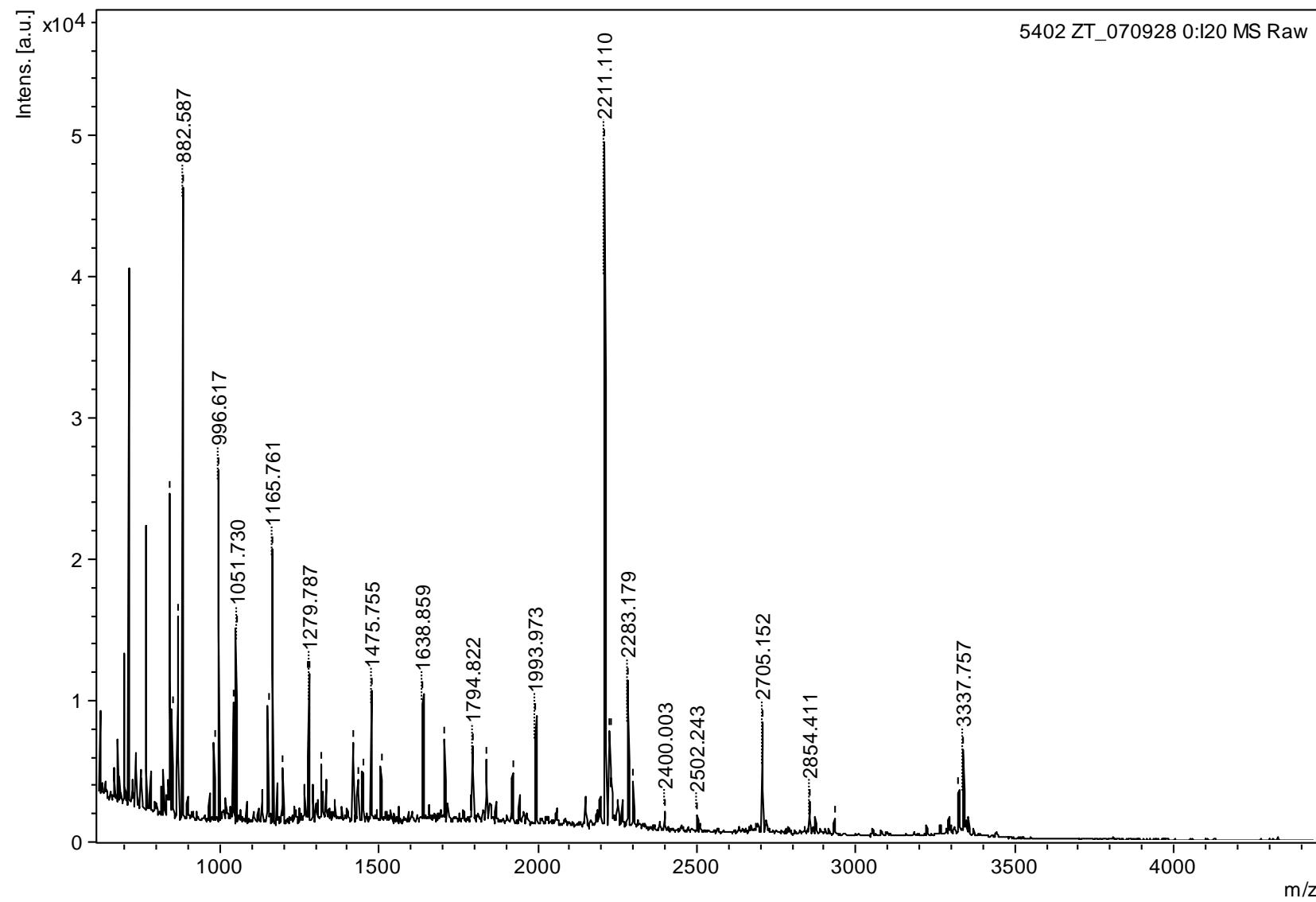
**Supplemental figure 8e: Tissue specific transplantation antigen P35B, NP\_003304**

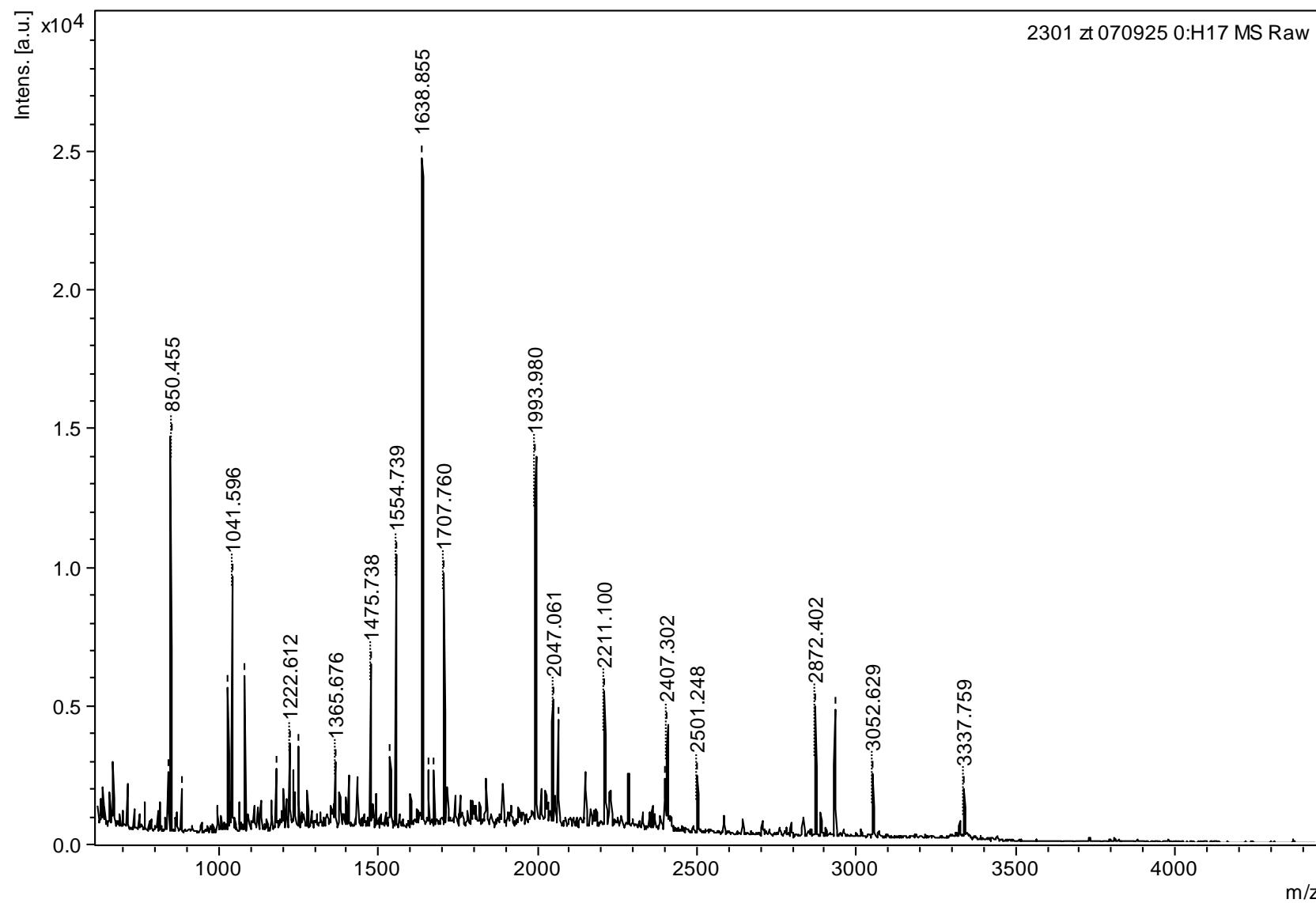
**Supplemental figure 8f: Nucleophism 1, NP\_954654**

**Supplemental figure 8g: Proteasome 26S subunit, NP\_002808**

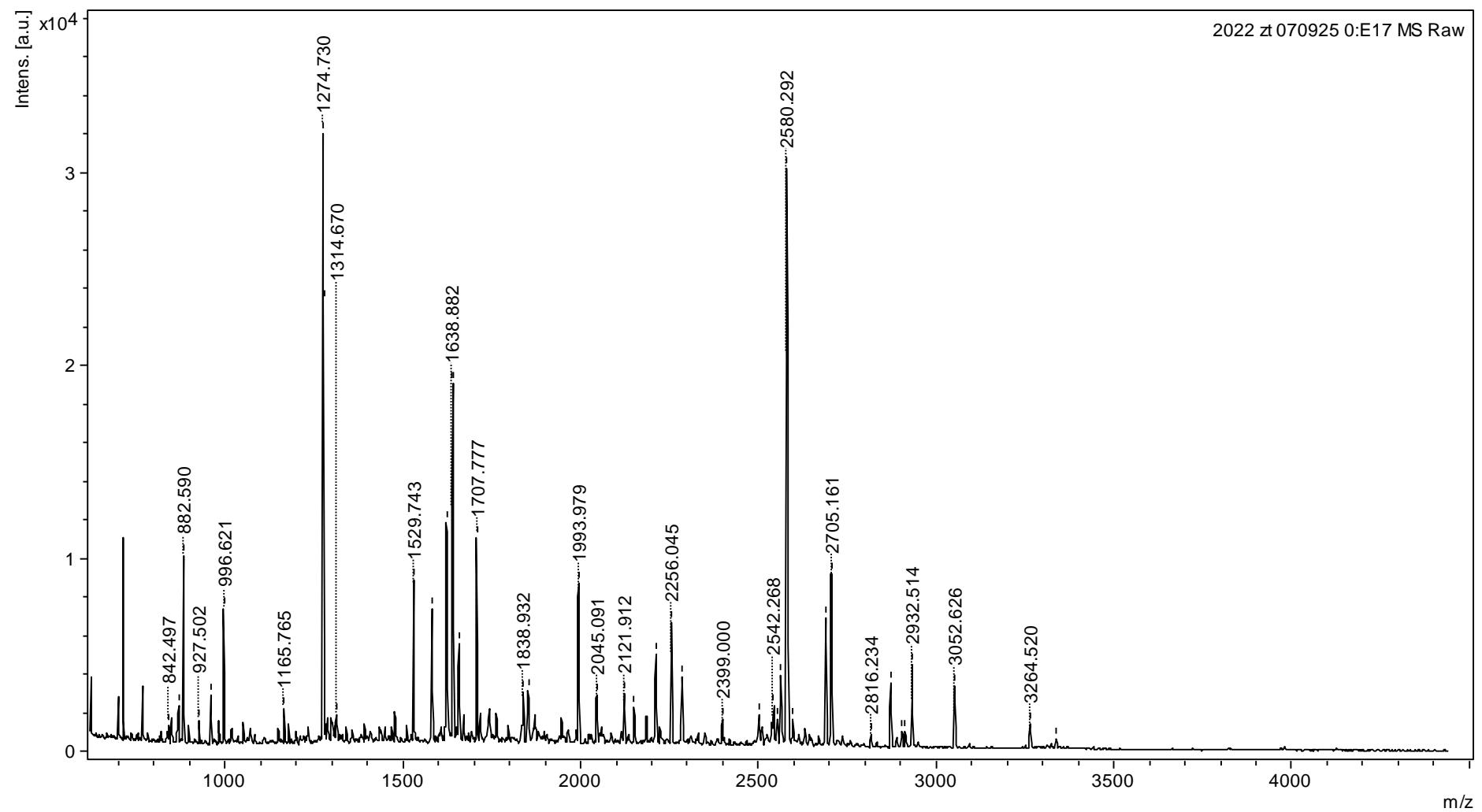
**Supplemental figure 8h: Cytokeratin 8, NP\_002264**

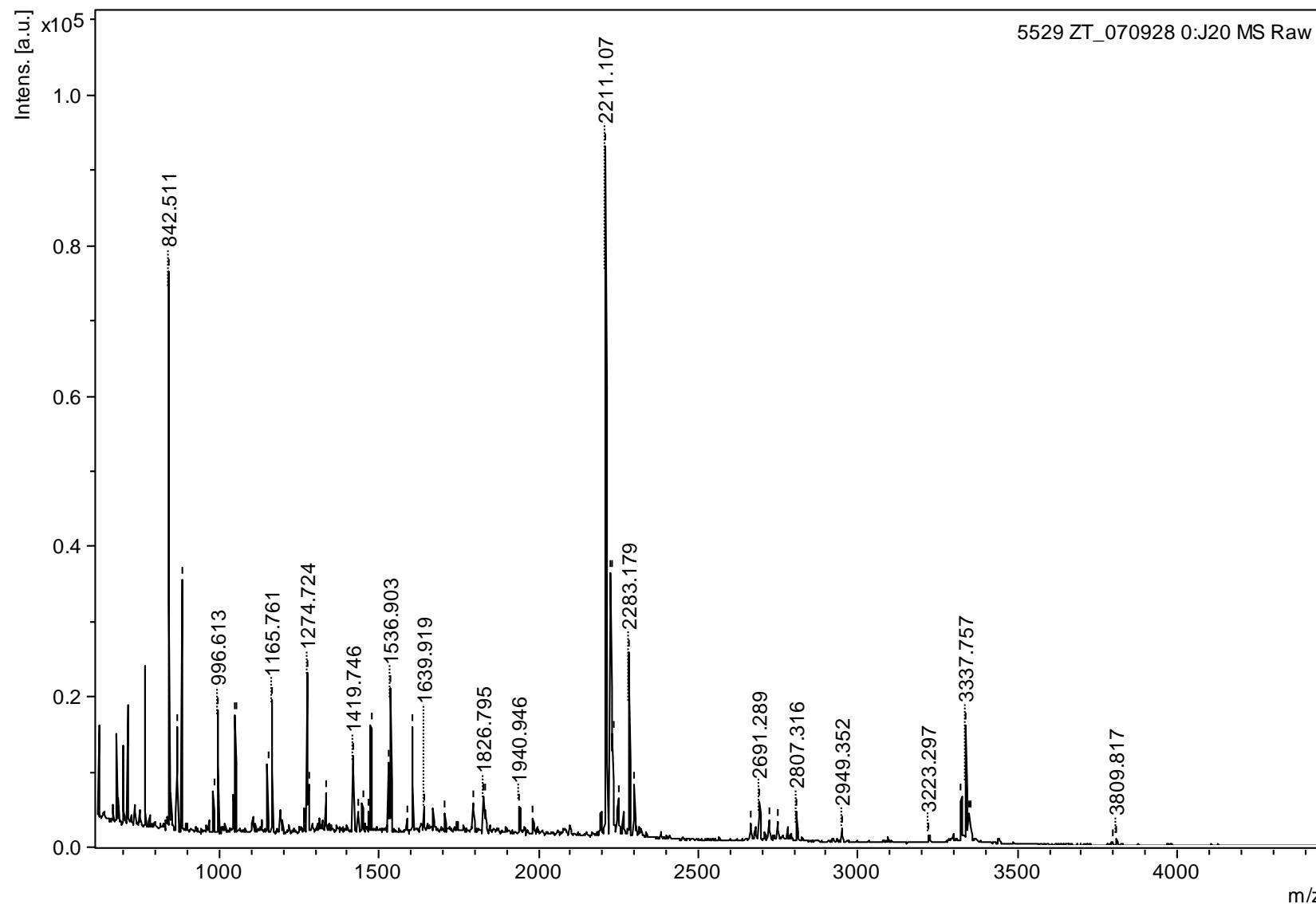
**Supplemental figure 8i: Cytokeratin 9, CAA52924**

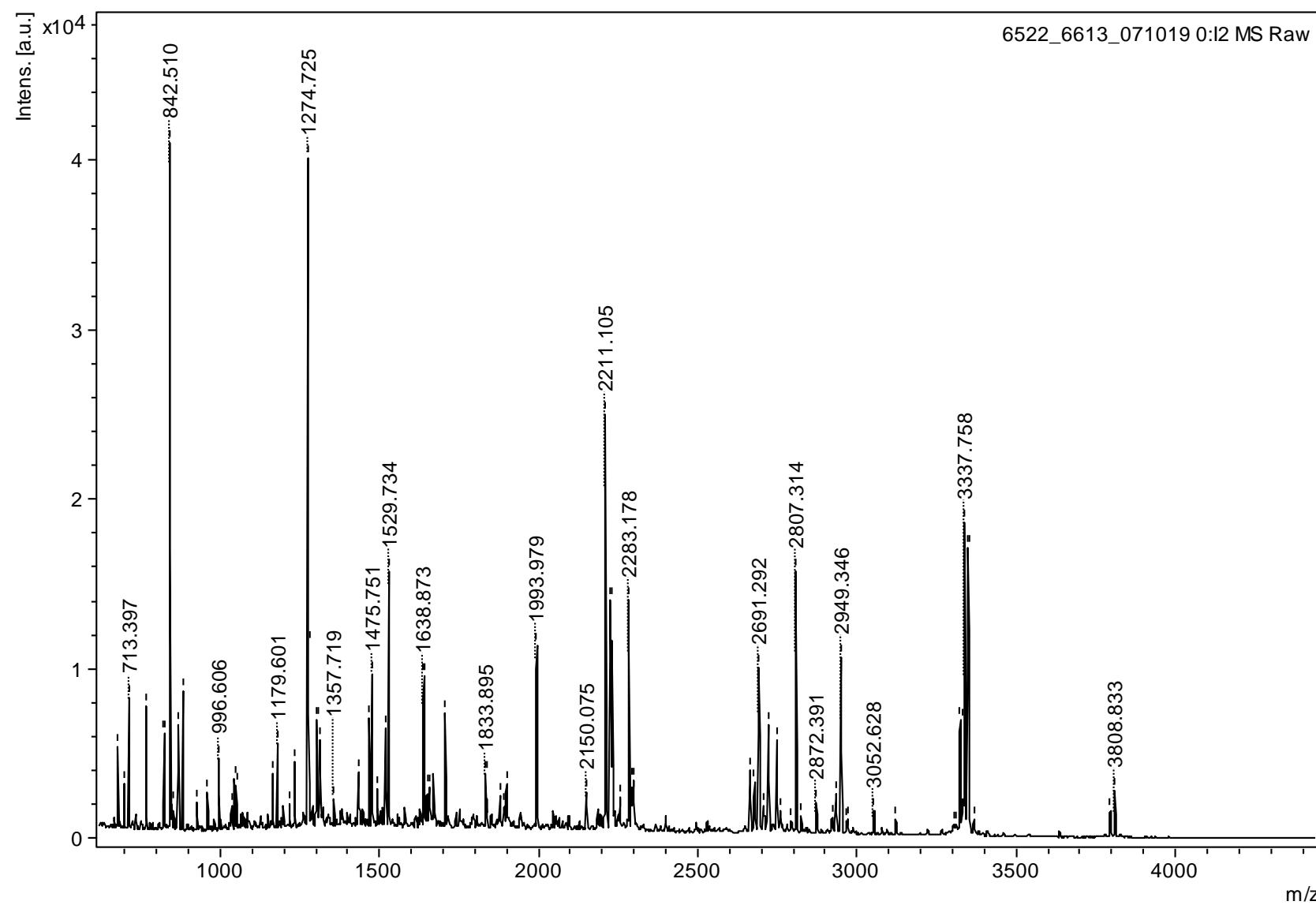
**Supplemental figure 8j: Cytokeratin 18, CAA31377**

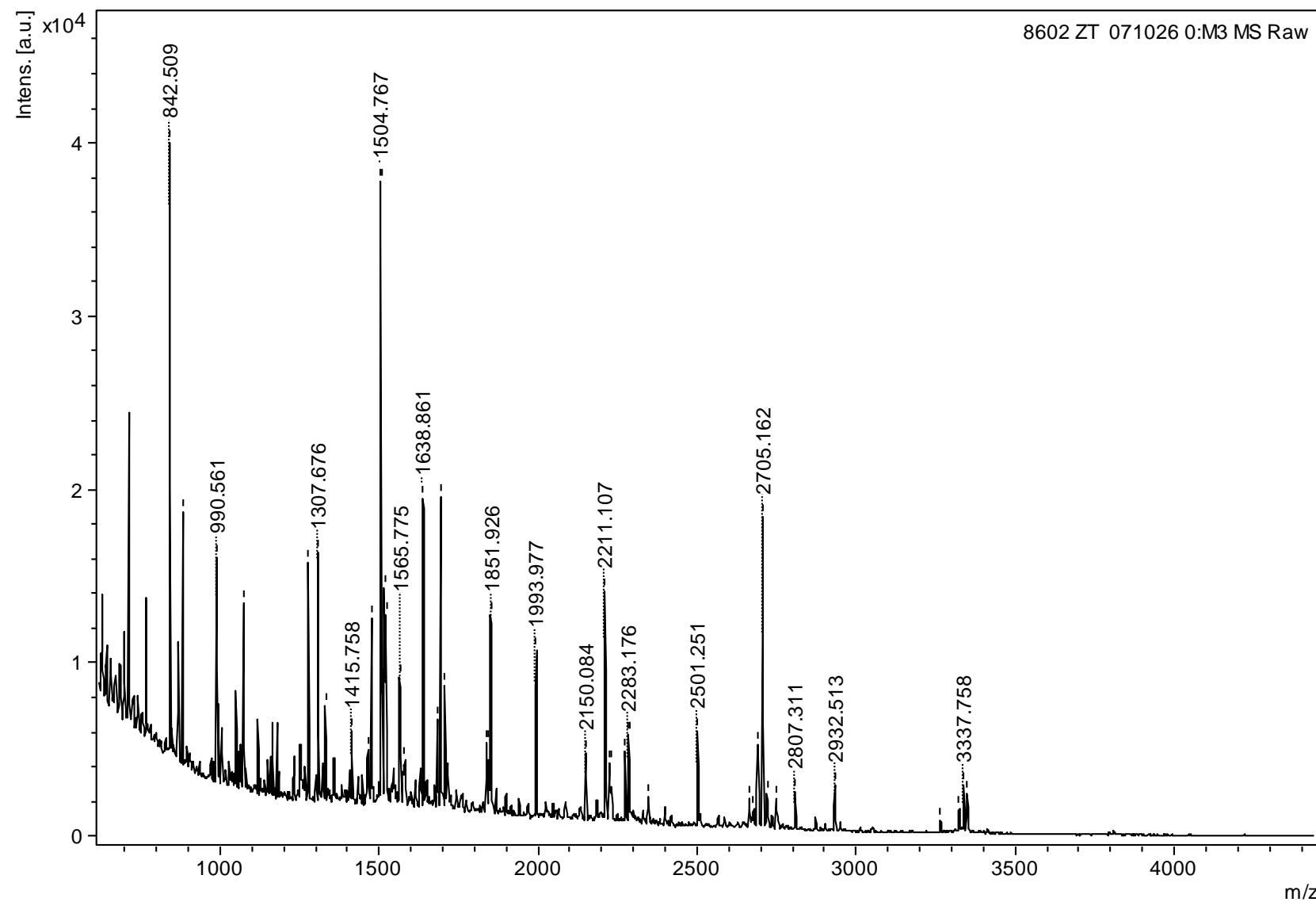
**Supplemental figure 8k: Cytokeratin 19, NP\_002267**

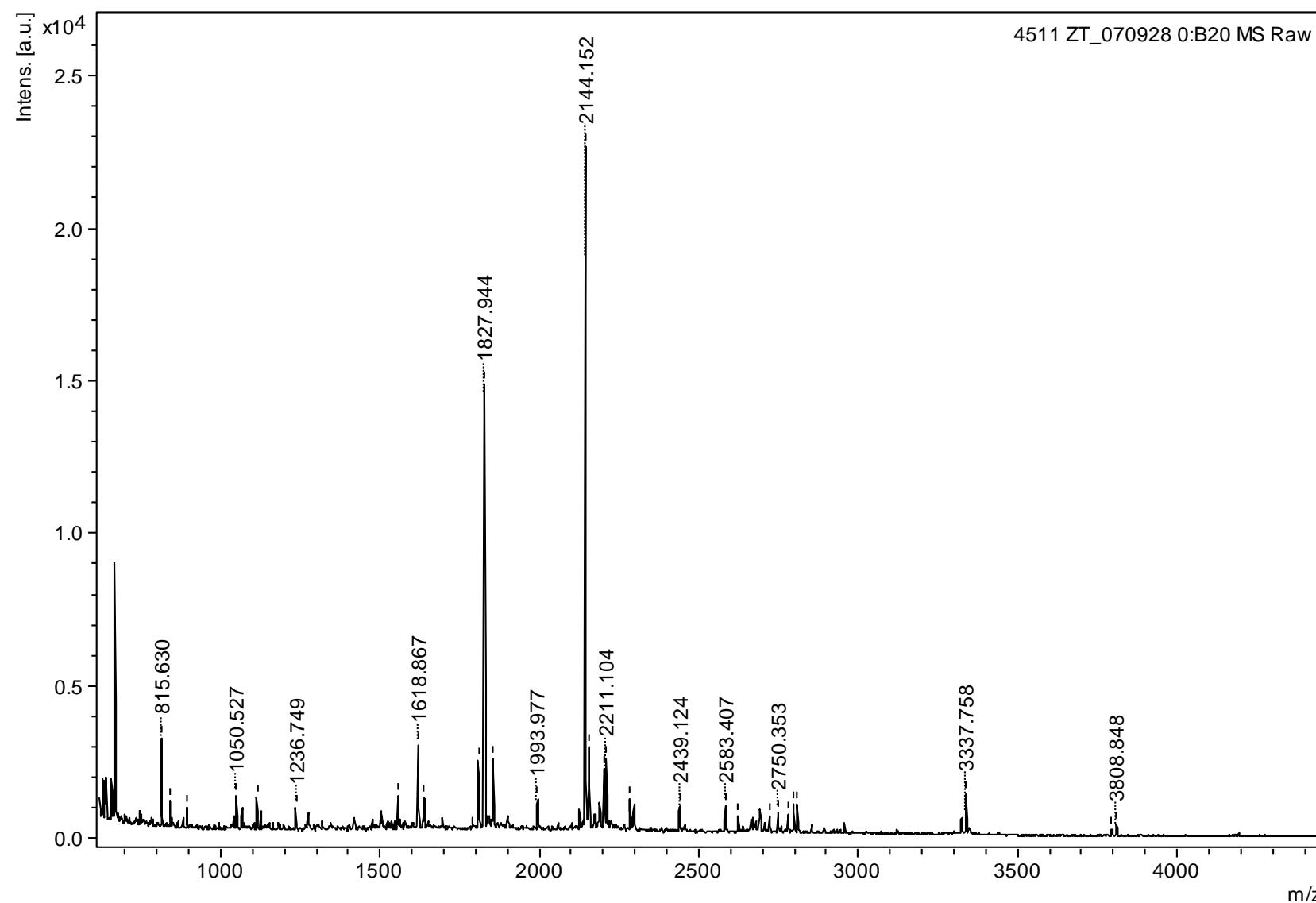
## **Supplemental figure 8l: Hemoglobin beta, NP\_000509**

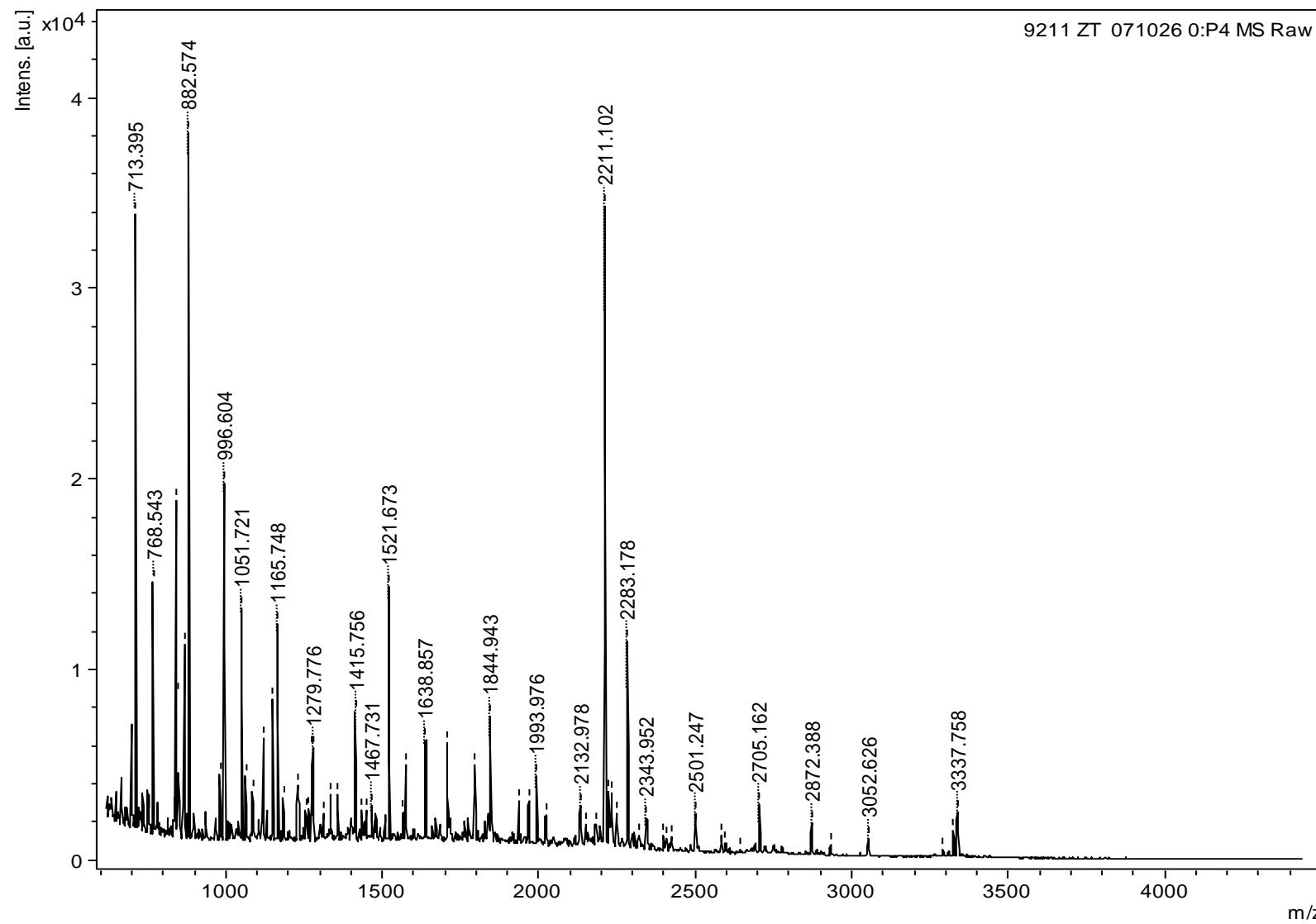


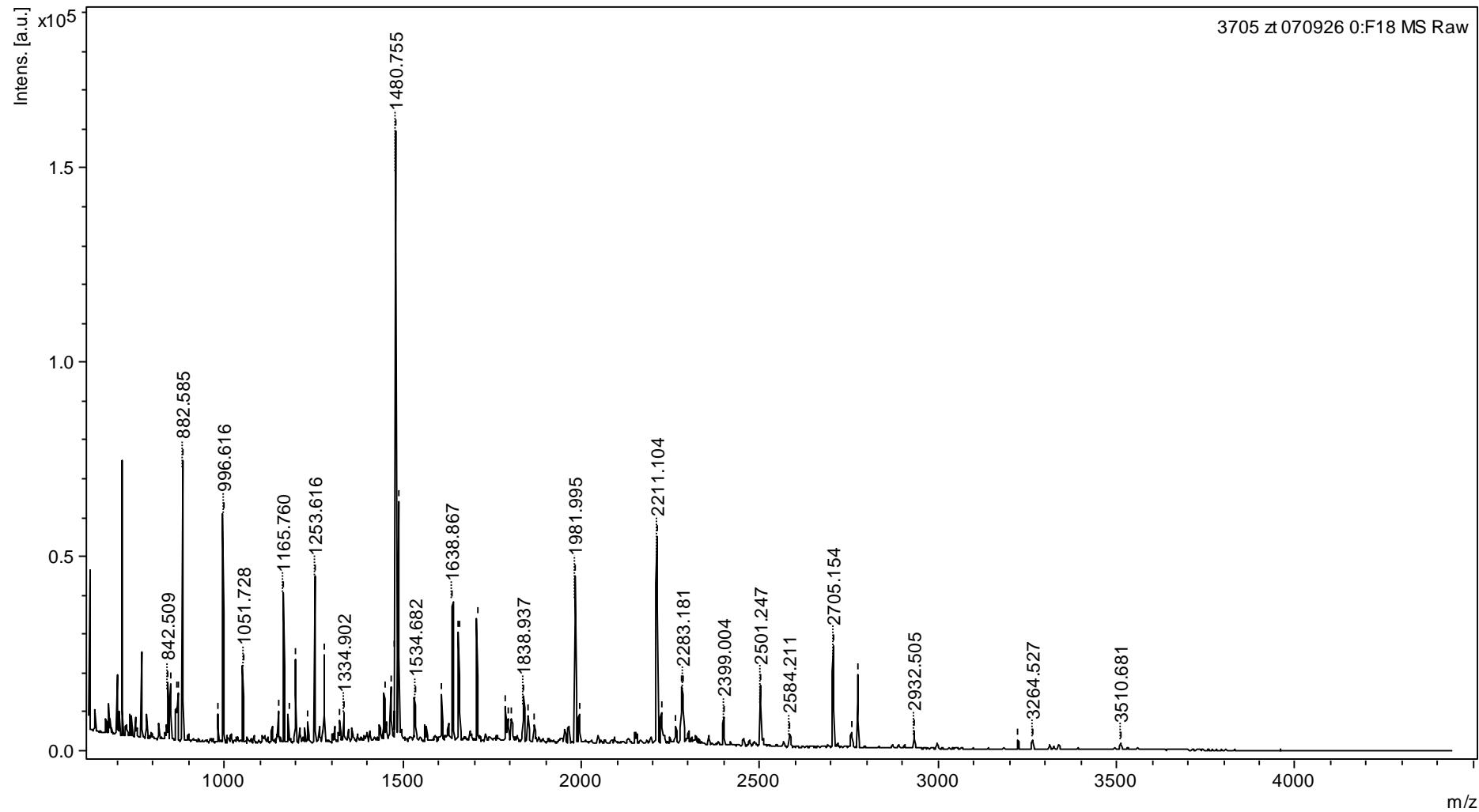
**Supplemental figure 8m: Tripeptidyl peptidase I, AAQ72732**

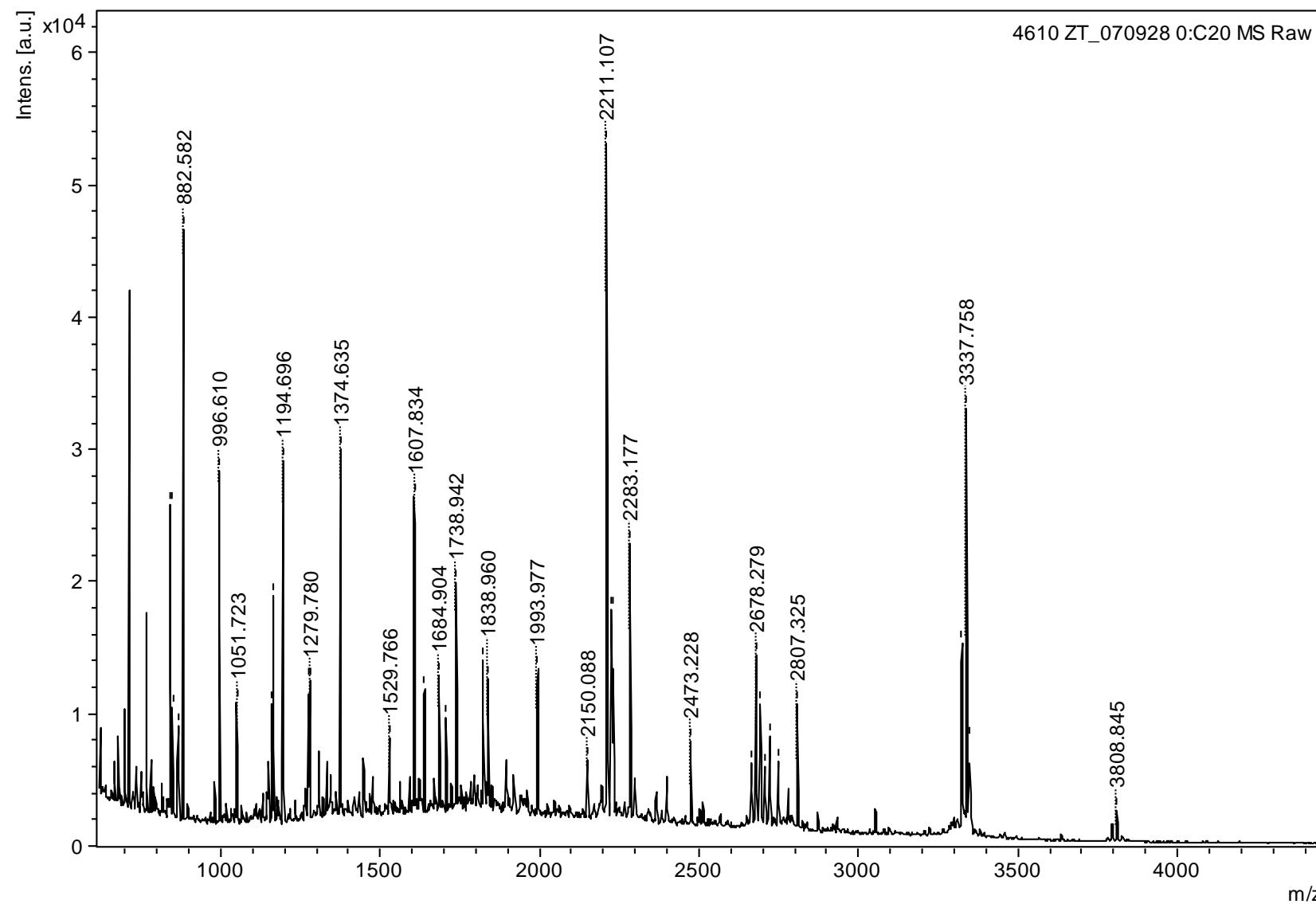
**Supplemental figure 8n: Decapping enzyme scavenger, AAH14532 & Upstream binding protein 1, NP\_055332**

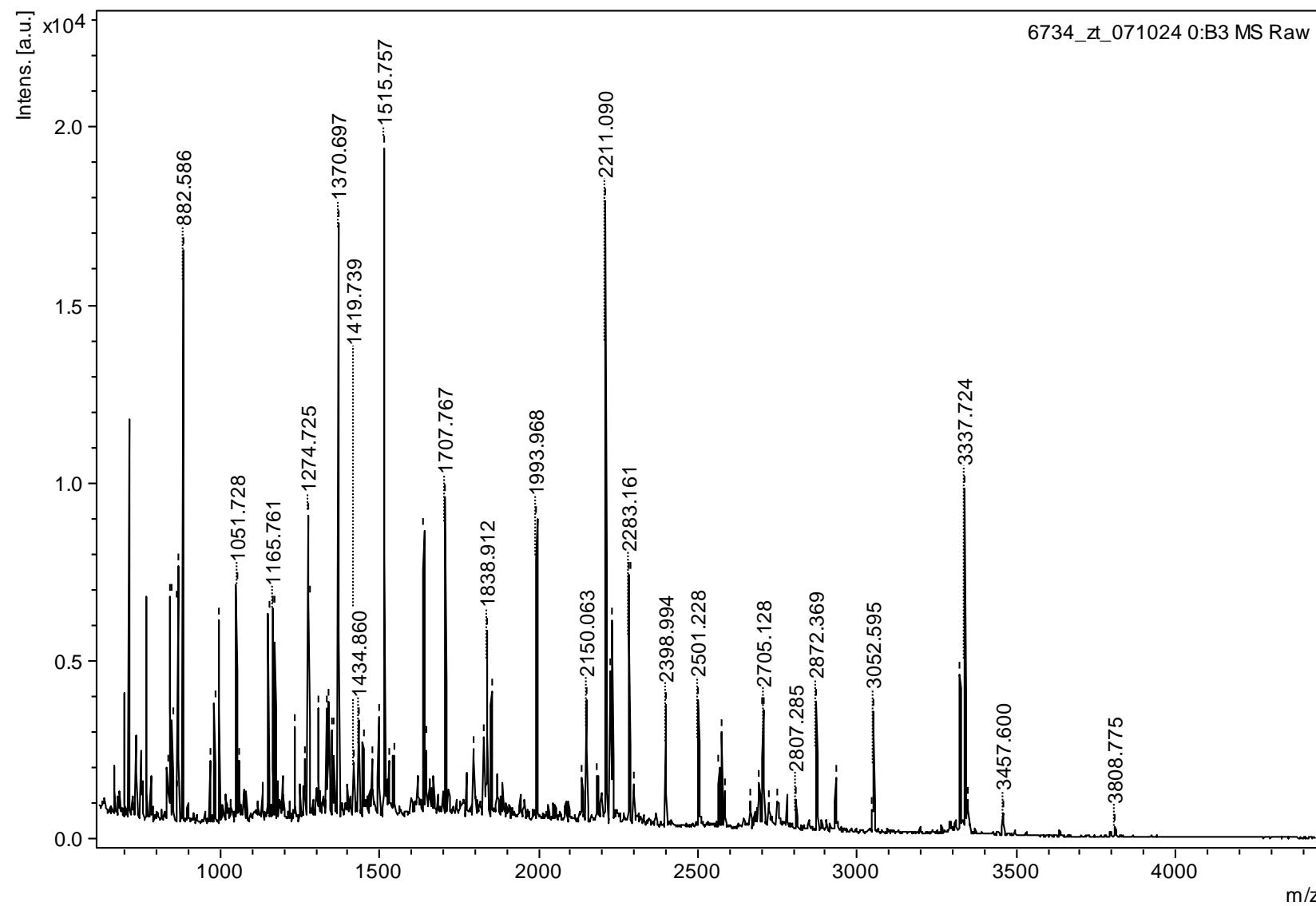
**Supplemental figure 8o: Seryl-tRNA-synthetase, AAH09390**

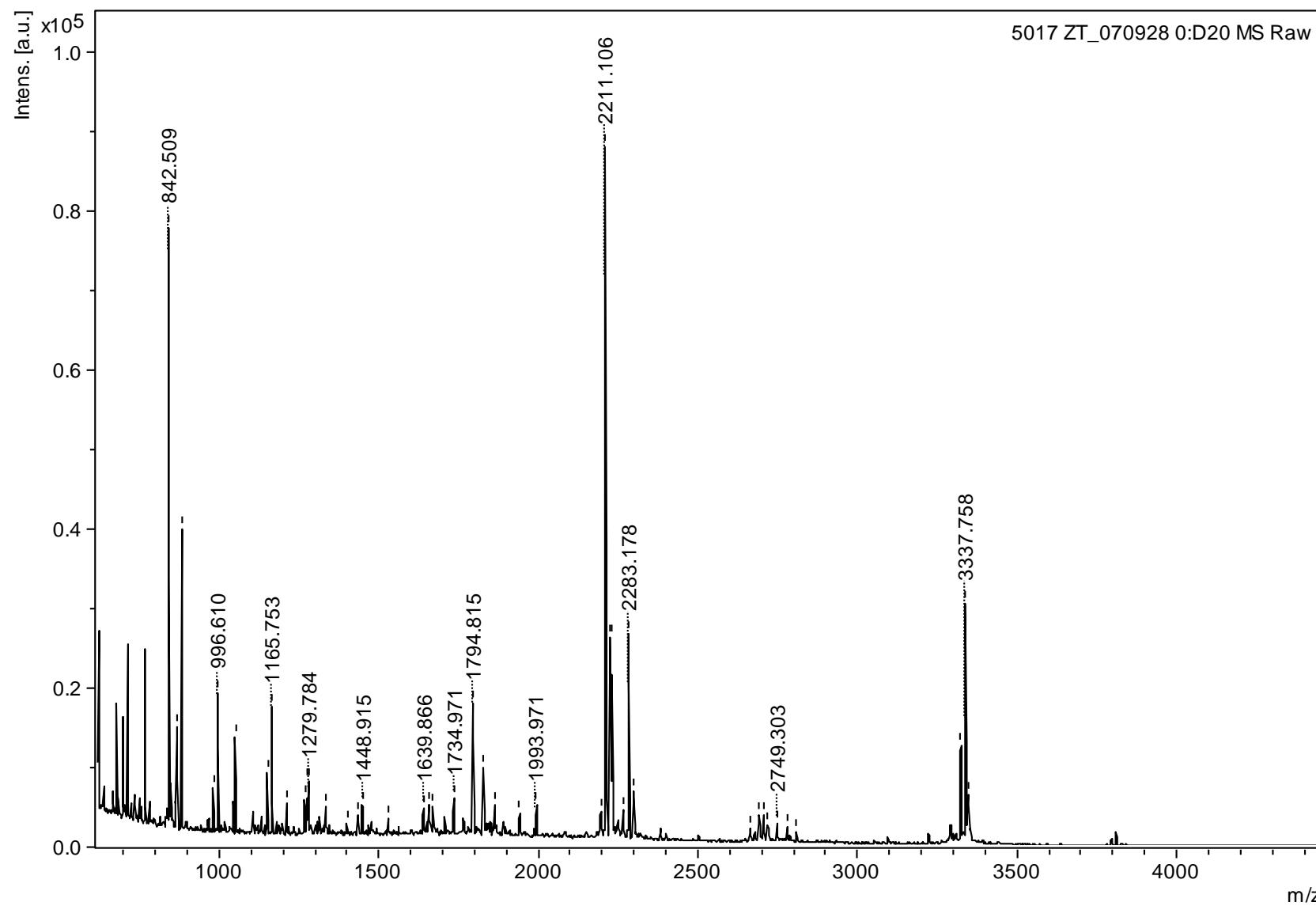
**Supplemental figure 8p: Eukaryotic translation initiation factor 4A isoform 1, NP\_001407**

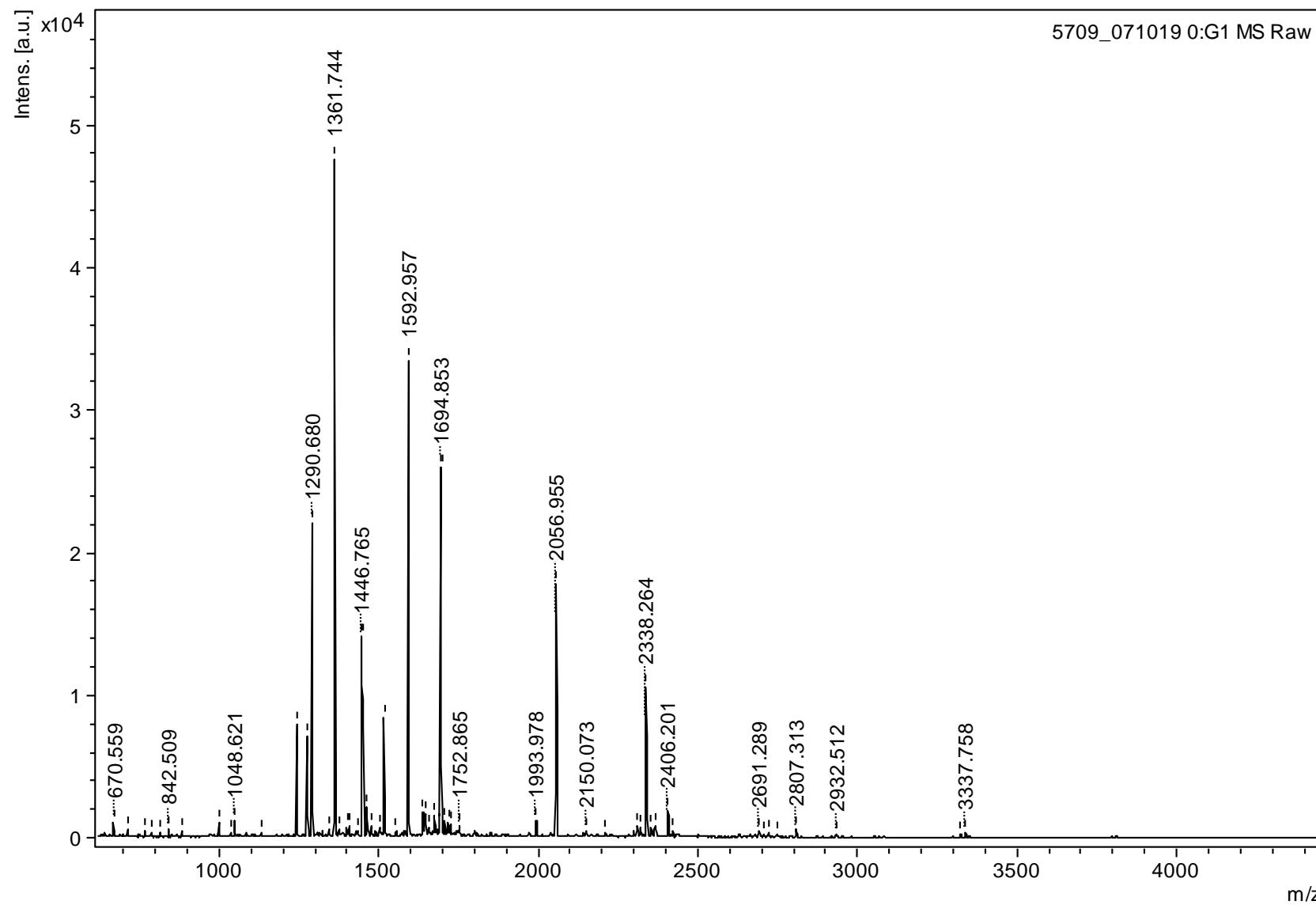
**Supplemental figure 8q: GNAS complex locus, NP\_536351**

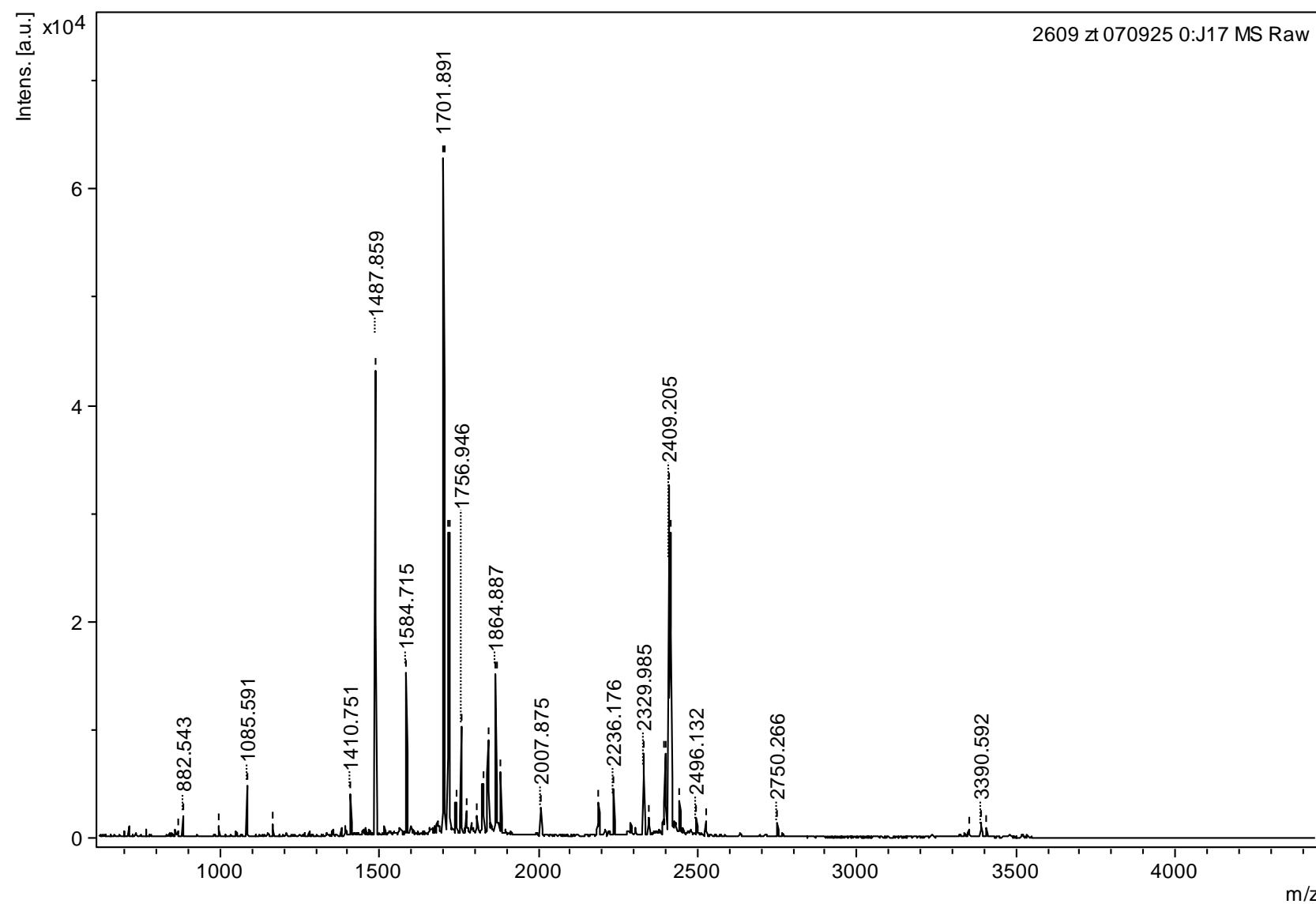
**Supplemental figure 8r: HSP70 protein 8, NP\_006588**

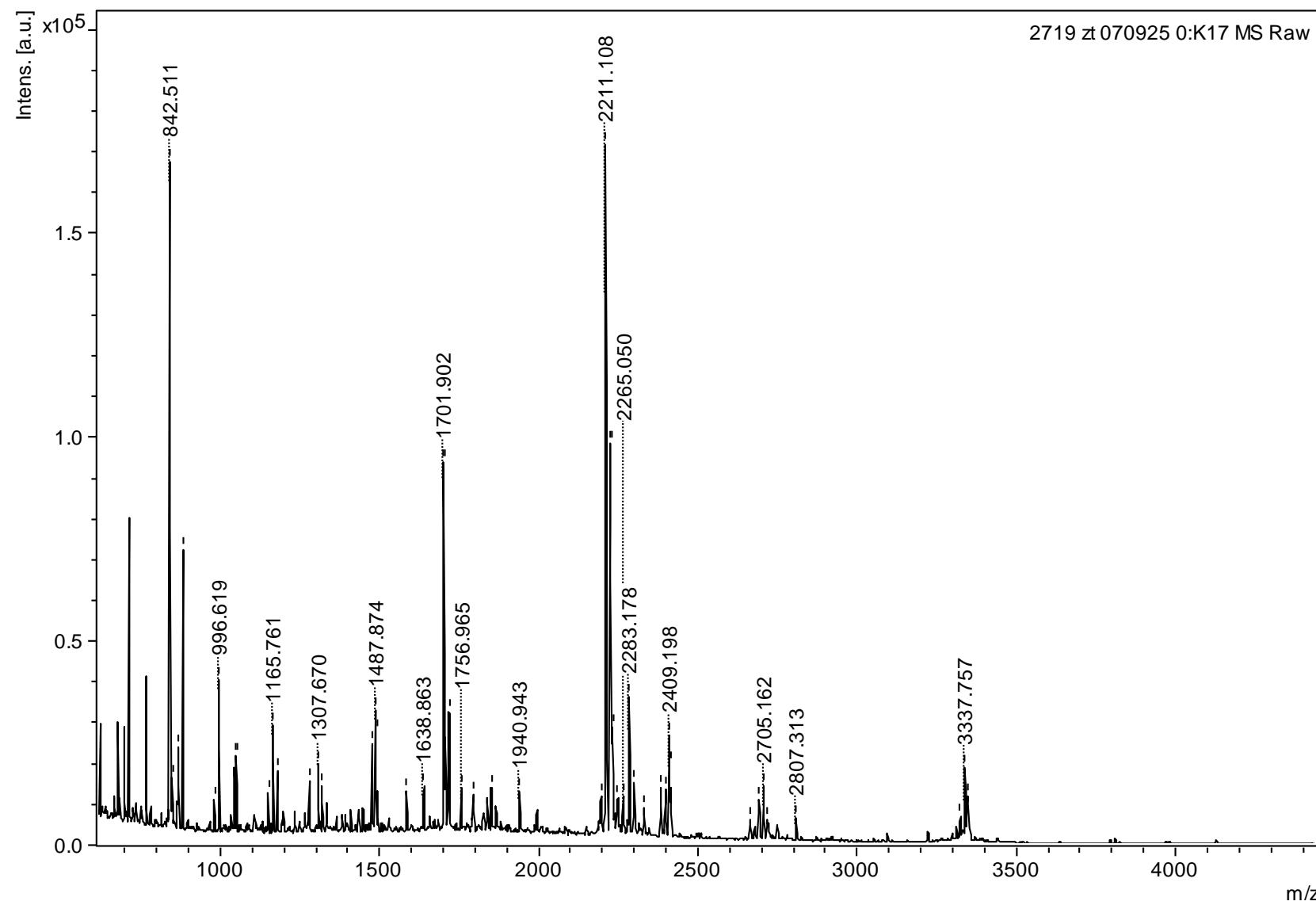
**Supplemental figure 8s: Histone deacetylase, NP\_001518**

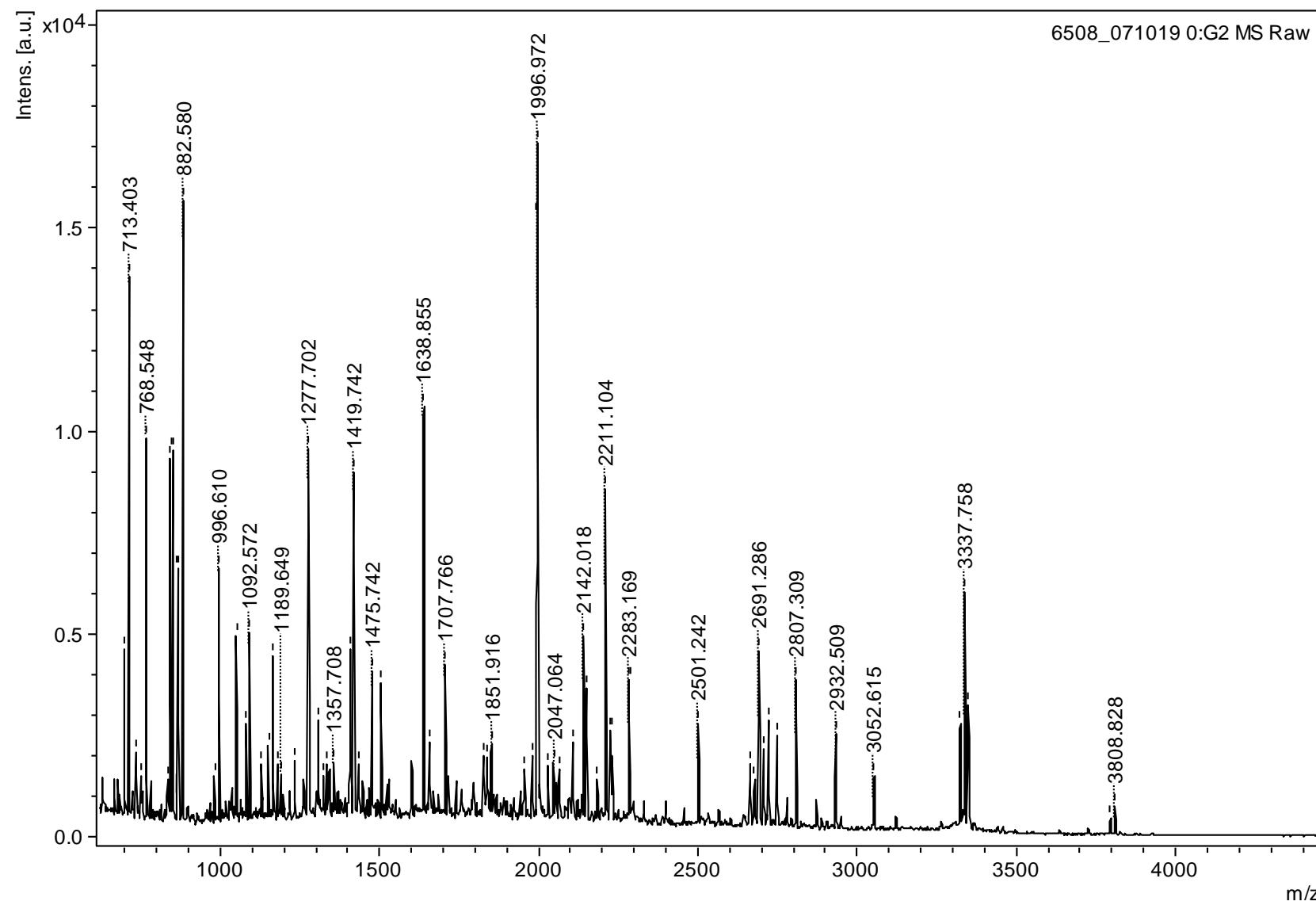
**Supplemental figure 8t: Protein disulfide isomerase family A member 3, BAA11928**

**Supplemental figure 8u: Peroxiredoxin 2, NP\_005800**

**Supplemental figure 8v: HSP70 protein 9, NP\_004125**

**Supplemental figure 8w: Tubulin alpha, NP\_006073**

**Supplemental figure 8x: Tubulin alpha, NP\_006073**

**Supplemental figure 8y: Heterogeneous nuclear ribonucleoprotein H1, NP\_005511**

**Supplemental table 1**

Cell line Name	ATCC Number	Organ/ Tissue/ Source	Medium	FBS (%)	CO <sub>2</sub> (%)
DLD-1	CCL-221	colorectal adenocarcinoma	RPMI 1640	10	-
HCT-116	CCL-247	colorectal carcinom	McCoy's 5a	10	5
LoVo	CCL-229	colorectal adenocarcinoma	Ham's F12K	10	-
Caco-2	HTB-37	colorectal adenocarcinoma	Eagle Medium	20	5
HT-29	HTB-38	colorectal adenocarcinoma	McCoy's 5a	10	5
T84	CCL-248	colorectal carcinoma	1:1 Dulbecco's Eagle / Ham's F12	5	5
COLO 201	CCL-224	colorectal adenocarcinoma	RPMI 1640	10	-

**Supplemental table 2a**

14-3-3	Nucleophism 1	Cytokeratin 9	Hemoglobin, beta	Thioredoxin-like 1
750.506730974746	842.509387160470	670.561909961837	842.497331373190	842.509447262637
768.524175887478	850.543744823573	713.395843536995	868.560043772249	850.551478690191
781.575734011128	868.556227868608	815.659307217923	882.59058147392	868.566805127752
842.485482795861	882.578004235881	842.509374856318	927.501596113956	872.540352212807 [196-202]
848.513773204952	968.577483870693	848.523957445786	960.570467693782	882.590081855154
850.535780153883	973.581363902053	882.569460481021	996.621084242867	973.583468844828
865.021882826552	982.578485099208	996.599115191256	1165.764639060860	982.594756192511
868.536385316465	996.603905706342	1054.626822803020	1274.730271977060 [32-41]	996.618860710049
882.565049773696	1051.716156859490	1165.741496969330	1277.722708458420	1045.586201085590
982.578097243939	1151.729083271470	1274.719783873540	1314.670288314710 [19-31]	1051.726726739090
996.599790881019	1165.744651170810	1279.767347962100	1529.743209691250	1073.542594331760
1051.711710553930	1198.668755475450	1307.670570883370 [240-249]	1580.798677235420	1151.740916907550
1133.712643731910	1279.772998946280	1428.770801676300	1623.791138096230	1165.756330580480
1151.721330184890	1341.638267712690	1448.920900217110	1638.882045933040	1197.679864841260
1165.745037029020	1358.701950645000	1529.745390586260	1639.945587249980	1277.721676802090
1189.644024055850 [216-225]	1434.884340877660	1638.855318416380	1657.797726880400	1279.790452019570
1256.577460719770 [131-141]	1448.906140731610	1707.775863566030 [46-62]	1707.776862862780	1358.726673444260
1274.715093394020	1526.683927088410	1792.995090548800	1838.931599526500	1403.804444550760
1279.772815929250	1534.899628338750	1838.922700356690	1853.911167026780	1413.751480914260
1334.895820859660	1562.927285587040	1851.927589170560 [321-335]	1993.979356533270	1475.754339164040
1365.635119155600	1568.759467645950 [33-45]	1993.975843878690	2045.091149863910	1621.778466446770
1384.677715166880 [131-142]	1583.894534828110	2150.073599808480	2121.911975249020	1638.857480164370
1447.694482027630 [30-42]	1629.806694106700	2211.111218829790	2150.082352005460	1707.771347813250
1448.922531128960	1638.844580336940	2283.173628411890	2211.104000000010	1794.824554221060
1498.832166354680	1654.873558542890	2399.006334709830	2256.044647678250	1890.960204010780 [86-102]
1513.830864703800	1707.764210313890	2501.245190043150	2286.090480657870 [42-62]	1993.975441512050
1516.854442931150 [43-56]	1794.813996553390	2663.275809259030	2398.999678719120	2180.077138310920
1517.876040566880	1801.826913844070	2677.272406956880	2501.251978513920	2199.104753838380
1524.693234866310	1819.833608126240 [249-262]	2691.290177055820	2542.267752062380	2211.105597646950
1532.835518151510	1826.791808391380	2705.178373452830 [63-94]	2552.311011821940	2225.122653882610
1545.869839606570	1835.843584148580 [249-262] Mox	2720.288358613960	2562.278149521790	2230.208867818090
1603.782520906800	1851.875219872130	2748.311095215320	2580.291923209190	2283.179997395060
1638.852622394700	1947.931396284120 [249-263]	2779.975009158430	2597.161533558570	2378.108718998350
1669.873868608610	1993.979048682660	2807.313885151510	2688.150257000300	2431.176582966970
1707.771365050230	2150.058862208310	3323.746549249270	2705.161306117410	2450.207240510260 [260-280]
1819.933625834870 [154-170]	2187.740614507340	3337.758234023240	2816.233998674650	2465.200764237490
1835.929334138480 [154-170] Mox	2211.105374163080		2872.396033072110	2509.196092412700
1993.976358252310	2224.1160911183200		2902.415273324270	2527.206450992800 [238-259]
2211.105807452380	2227.204291436710 [81-101]		2913.481366203690	2550.285346626580
2225.114589573970	2243.202216922740 [81-101] Mox		2932.513758329190	2568.306987433720 [212-234]
2283.178703774990	2283.178758206990		3052.625511040470	2705.169230006930
2331.202284138310 [171-190]	2410.222360982850		3264.520074955220	2721.323937636960
2336.217648021110 [30-50]	2501.230488033450		3337.722625460330	2872.395184290350
2501.250786606510	2573.195703491290			2916.406128917930
2541.233771080700	2691.280415255910			3052.623989407790
2560.258944545470	2705.158826185000			3323.742995746890
2588.265037103470	2720.265654573350			3337.757816191480
2705.156878606450	2807.355117124930			3346.674436515730
2872.389403581370	2929.450553131130 [46-73]			
2932.510770145090	2938.504605006730			
2976.483275412880	3337.758080466660			
3023.515333406150	3440.563286713730			
3052.608838004080				

**Supplemental table 2a (continued)**

14-3-3  
(continued)

3258.613706212750

[197-225]

3274.619571656640

[197-225] Mox

3290.658160157960

3337.758030519690

3451.484580069210

[226-255]

**Supplemental table 2b**

Cytokeratin 19	Tubulin, alpha (SSP #2609)	Tubulin, alpha (SSP #2719)	HSP70 protein 8	Capping protein muscle Z-line, alpha 1
842.509254814162	868.521937233698	842.511463976082	842.509399999993	842.509400000002
<b>850.454595863234</b> [25-32]	882.543459723247	850.556013863689	848.529184390050	850.551161065867
882.563224355548	996.580342870177	868.567900674880	850.553763991077	868.555575004895
<b>1029.579664341640</b> [189-197]	<b>1085.591485115620</b> [113-121]	882.590585146590	864.563046605503	882.582459820048
<b>1041.595854747860</b> [151-159]	1165.725479120370	982.601718882032	868.560561707662	996.612821778768
<b>1082.509327705800</b> [266-274]	<b>1410.750705020680</b> [85-96]	996.618743003758	882.584744334391	1036.530241100080
1179.583139196830	<b>1487.858710760510</b> [230-243]	1045.561444970950	982.589781504397	1051.722652212530
<b>1222.612052094120</b> [167-176]	<b>1584.714911343860</b> [340-352]	1051.730020034510	996.616042781472	1165.755632071270
1250.616960292930	1585.334534564660	1151.740639063200	1051.728478309710	1179.610183643060
<b>1365.675834613070</b> [371-381]	<b>1701.891445422420</b> [65-79]	1165.761039981390	1151.738404019400	<b>1197.686370320610</b> [38-47]
1475.737618782080	1703.987479493620	1179.599725372460	1165.759739967200	1225.631209364220
1537.707429210680	1715.905761736140	1279.787419906620	1179.610723582750	1274.716989001210
<b>1554.739042540800</b> [8-24]	<b>1718.880131559650</b> [216-229]	1307.669669798460	<b>1197.686714678450</b> [459-469]	1279.779931072190
1638.855312392900	<b>1740.819433836540</b> [339-352]	1320.581806211970	<b>1199.682421312680</b> [160-171]	1307.672889518130
1657.783825495240	<b>1756.946213713230</b> [265-280]	1475.753970804620	1234.671589938130	1475.750418707590
<b>1674.762261825310</b> [126-138]	1773.876276700730	<b>1487.873906059910</b> [230-243]	<b>1253.616171597160</b> [302-311]	1638.856293165670
1707.759526687560	1807.873041193030	1493.732957494230	1277.708529525640	1657.786093189800
1993.980423865050	1825.247318606680	<b>1584.745178315490</b> [340-352]	1279.787995657310	1707.761344158790
2047.061285612470	<b>1841.994489147830</b> [106-121]	1638.863468792500	1323.674346486420	1722.792306554080
2064.120162990960	<b>1864.886549368480</b> [374-390]	<b>1701.901685278080</b> [65-79]	1334.902292216660	1794.815861311800
2211.099843943190	1869.972467173060	1707.768300890390	1448.932939650240	1838.925273545680
2399.114305032720	<b>1880.888514957710</b> [374-390] Mox	<b>1718.881530985960</b> [216-229]	1465.950167986470	1851.921148412830
<b>2407.301698150540</b> [331-353]	<b>2007.874722362520</b> [41-60]	<b>1756.964626013220</b> [265-280]	1475.746831090970	1993.972585019450
2501.247833325220	2189.150972843740	1794.823447722620	1479.727746041220	<b>2089.005782259830</b> [20-37]
2872.401992511620	2236.175889566670	1851.923774393690	<b>1480.755255366130</b> [300-311]	2211.103999999990
2932.526008415280	<b>2329.984553320150</b> [403-422]	1940.943410157420	<b>1487.703580942860</b> [37-49]	2225.115625071480
3052.629157761000	<b>2345.988072136050</b> [403-422] Mox	2196.280085701260	1534.682216051070	<b>2245.062009348300</b> [67-86]
3337.758577358540	2395.124083159840	2211.108201583590	1608.867824219800	2283.173750886130
	2398.155156617120	2225.122112280700	1638.867270636160	2286.108020228000
	2401.360649741750	2230.202281810450	1655.905360184660	<b>2314.150222437820</b> [147-166]
	<b>2409.204709180830</b> [244-264]	2233.083585334470	1657.783941778170	2383.944006230740
	2414.199115073100	<b>2248.110428475470</b> [371-390]	1707.770754722650	2399.010620104490
	2416.204047963290	2265.049501165730	1786.858601278760	2453.220342232110
	2443.181206544510	2283.178470962150	<b>1787.968063145590</b> [172-188]	2471.233009895120
	2496.132244796500	2297.189371313360	1794.819090743700	2487.222093383050
	2525.167939818170	2299.170373698990	1803.892502676640	2501.252807710680
	<b>2750.266411376970</b> [281-304]	<b>2330.007436574250</b> [403-422]	1838.936782468500	2705.157627747600
	3350.846072974930	2383.940276782350	1851.927044222870	2717.079616203820
	<b>3390.591509133590</b> [125-156]	2399.027384669210	1867.938612419630	2932.514894000700
	<b>3406.605219479390</b> [125-156] Mox	<b>2409.198431316700</b> [244-264]	<b>1981.995284095460</b> [138-155]	3312.307520045280
		2414.190280586900	1993.97636318330	3323.746695202000
		2416.199137002910	2211.104000000020	3337.758000000010
		2663.259173785890	2225.116420926760	
		2691.285423200000	2265.037542727940	
		2705.161792709400	2280.197335667450	
		2717.089402820360	2283.181289512660	
		2807.313499004620	2286.072424194990	
		3323.746378101640	2399.004493458210	
		3337.756993277490	2501.247182649180	
		3346.683265670990	2584.211451524170	
		2705.153904369090	2756.298687762150	

**Supplemental table 2b (continued)****HSP70 protein 8  
(continued)****2774.320733238330****[424-447]**

2932.504529436900

3223.288789689340

3264.527382581240

3510.680760789980

**Supplemental table 2c**

Eukaryotic translation initiation factor 4 A, isoform 1	Histone deacetylase 2	Peroxiredoxin 2	Proteasome 26S subunit	Cytokeratin 18
815.630244621692	842.509373980746	842.509381702506	842.509371899849	842.509541095476
842.494674537355	848.518801934968	868.557960132080	868.561305375996	850.550667331475
<b>894.452241325880 [162-168]</b>	850.551592406836	882.581593169515	882.587700969264	868.563235196947
<b>1050.527076177050 [162-169]</b>	868.553573011562	982.596060309999	996.614661138249	882.586555641644
<b>1114.647795600380 [325-334]</b>	882.581862102981	996.610228387124	1051.728013000000	982.599596742537
1236.749272249510	996.610112425865	1051.722375310970	<b>1153.592438699890 [331-339]</b>	996.617321675477
<b>1555.700178730320 [178-190]</b>	1051.723378443310	1151.734107476200	1165.755363669520	<b>1041.604186801050 [144-152]</b>
<b>1618.866758874780 [147-161]</b>	<b>1160.563065862720 [222-230]</b>	1165.753340331790	<b>1169.599310931770 [331-339] Mox</b>	1051.729835137350
1638.848164261660	1165.753507134190	<b>1211.668505762290 [140-150]</b>	<b>1583.745683113210 [59-70]</b>	1151.740663765120
1808.910268144820	1194.696215779640	1268.736212386820	1707.778621666970	1165.761276869290
<b>1827.944114415470 [46-61]</b>	1274.721180919780	1274.720006975280	1794.822068815840	1198.703910379820
1855.932623720310	1279.780369115380	1279.784361488870	<b>1982.006388620570 [253-270]</b>	1277.704704662080
1993.976700000030	<b>1374.634697673790 [202-213]</b>	1334.894370268440	<b>2025.996564554330 [231-247]</b>	1279.787429515280
<b>2144.151550624040 [335-353]</b>	1529.765898353180	1400.690856343160	2042.030402202450	<b>1319.664487794080 [132-143]</b>
2155.153022654930	<b>1607.833616101090 [38-50]</b>	1434.901276663120	2114.031950235760	<b>1419.746410052240 [353-364]</b>
2202.164509008010	1638.862646977090	1448.915346816130	<b>2133.061792977560 [179-196]</b>	1433.761493291720
2211.10399999970	1684.903753609750	1529.730161432440	2211.107007505490	1448.925906916900
2284.183516030680	1707.789787379540	1639.865810347350	2225.117094734380	1475.755381877020
<b>2439.123992847120 [119-141]</b>	1738.941544313550	1657.795483425180	2283.177044477550	<b>1506.746809191580 [296-308]</b>
2583.407239513450	<b>1822.981200738200 [291-307]</b>	1669.886119459370	<b>2469.188704974320 [133-154]</b>	1638.859443125010
2624.313674370010	<b>1838.960486967710 [291-307] Mox</b>	<b>1734.971386211000 [93-109]</b>	<b>2485.191053991270 [133-154] Mox</b>	1707.768562840840
2721.292521279450	1993.976773873140	1794.814630698120	<b>2512.226200730190 [227-247]</b>	1794.821504849180
2750.352981915490	2150.088184996760	1826.789195858550	2580.314660695800	1837.942282735510
2780.455975733460	2211.106784767890	<b>1863.061083075810 [92-109]</b>	3323.737095077950	1920.999819800980
<b>2797.405252170340 [383-406]</b>	2225.122912533130	1940.925321850880	3337.758176111690	1993.972730354840
2807.327212056950	2230.206689688130	1993.971235374020		2211.109893819300
3337.758000000370	2283.177278178240	2196.247783170890		2225.117871209120
3794.841942478550	2473.227965447460	2211.105958330350		2230.206636210460
3808.847929938740	2663.278654698160	2225.118534516080		2283.178664525230
<b>2678.278507194090 [171-193]</b>		2230.208175994020		2299.175131268350
2691.296754441530	2265.038863300470			2400.002674270610
2705.204510903580	2283.178145288930			2502.242642746880
2720.287100056530	2297.188795860600			2705.151572907540
2749.309656731330	2299.166409451820			<b>2854.410993838440 [9-39]</b>
2807.324676399280	2664.267473792210			2932.473353722530
3323.757596488640	2691.286074939150			3323.743010164930
3337.758163067630	2705.158249221940			3337.757470232550
3346.665636191700	2718.082104154340			
3808.844682688060	2749.302576409700			
	2780.435613898830			
	2808.317604905570			
	3323.743968847120			
	3337.758114674340			
	3346.680305743780			

**Supplemental table 2d**

Tripeptidyl peptidase I	HSP70 protein 9	Aspartate beta-hydroxylase domain containing 2	Cytokeratin 8	Heterogeneous nuclear ribonucleoprotein H1
842.511126358023	670.558500186584	658.381635305461 [253-258]	620.358864959278	699.377804367870 [45-49]
868.562365933023	713.390952614086	768.519037294287	658.394281972488	713.403467594792
882.584996032495	768.537818173863	842.509344498723	842.509259754351	734.462765081292
982.602152959334	788.416898511688	868.512316455509	870.523396264825	750.527291563431
996.613054666748	815.651640828034	882.544868557340	1081.556832055350 [9-18]	768.548022350232
1045.561021746880	842.509367648643	996.572845837745 [291-298]	1129.601029123240 [353-362]	835.485029396016
1051.726730398830	882.568983692898	1045.580390747510	1277.71120045510 [342-352]	842.509399999992
1151.741186792030	1000.588998455780	1051.701866306530	1307.671595194070	848.512289639476
1165.760600326690	1036.549353008850	1131.610344494300	1323.713091404890	850.527425732231
1274.723830046000	1048.621016680050	1151.691524535640	1341.744131269700 [317-328]	852.532084225168
1279.784496675740	1132.663825045340	1165.654571412800	1344.694586457490 [329-341]	864.542812070590
1334.903294697650	1242.680869840870 [209-220]	1179.601930124160	1369.749140766110	868.536497057609
1419.746288379780	1274.723779376690	1198.754395820090	1400.695450595740	870.533118030609
1434.905368290270	1277.706393381610	1218.631215351870	1419.770092843570 [214-225]	882.580463931882
1448.929632343310	1290.680125957860 [397-407]	1234.662961646720 [359-369]	1475.739287816920	982.588050509538
1467.833336441060	1343.721908808350	1277.727322971170	1638.850425841680	996.610481793245
1474.754311079810 [3-16]	1361.743898482570 [351-362]	1309.669266848910	1657.829142826740	1051.717554328230
1529.736119932050	1375.727495026870	1357.734595640310	1707.779515795130	1082.591667762420
1536.902714957890 [250-263]	1400.681580126680	1400.707786148540	1847.826952944260 [134-148]	1092.571754970300 [317-326]
1586.802486644660	1407.544402031710	1434.773827172130 [126-136]	1956.061578576230 [329-347]	1129.603660207490
1604.820188748150 [264-277]	1434.766369418620	1448.882071668290	1993.980296777830	1151.731092655210
1639.919352214580	1446.764875382150 [380-393]	1475.786877043550	2003.922450119840 [134-149]	1165.749958524950
1707.784108575010	1450.720217717430 [88-101]	1638.854476429520	2211.099985843760	1179.602979228040
1794.819334579880	1462.758832273210 [380-393]	1657.848415963420	2807.325865145390	1189.648711180780
1826.795370853990	1475.7552741117230	1707.765065476790	3323.796403407430	1234.665066743760
1833.885667867940	1503.020970414780	1716.812842376440	3337.758557605180	1274.715374463530
1940.945987495810	1517.849085081760 [351-363]	1838.897481502050	3808.750352554140	1277.701993703020
1982.949131031350 [205-222]	1553.846346173790 [162-175]	1852.943919471290		1307.669201962550
2211.106683758110	1592.957078729270 [501-515]	1993.978123488370		1323.693254818690
2225.119142133570	1638.864271413410	2211.102411310970		1334.892502655340
2230.206349748380	1645.845847555410 [221-236]	2230.279083272700		1357.708236314810
2233.093489886710	1657.799460416360	2663.359395319430		1408.659129455770
2249.071124696550	1674.861278504190	2691.306233831690		1419.741764042740
2283.179164259670	1694.852767066290 [190-204]	2748.330866577170		1434.788132725740
2299.183077383210	1698.917672235120	2807.301706085770		1475.741602067080
2663.262797594690	1706.824644009790 [295-309]	3337.758220693640		1504.683484508030 [17-29]
2691.288815232240	1718.859452046560	3369.435996090050		1638.854591205460
2720.274758239310	1724.866143518650 [110-124]	3440.524904304720		1657.792353562880
2748.311303631270	1752.864907588590			1707.766456879170
2807.316199911390	1993.977529759690			1826.795946269790
2949.351752395710	2056.955101044070			1838.922249829490
3223.296631183790	2150.072846095330			1851.915806620300
3323.745013691320	2211.103073940870			1956.016367848190
3337.757303980880	2309.208349169210 [516-537]			1979.977523330070
3346.670471053210	2320.231356202150			1993.971711988370
3354.762951486180	2338.264173311840 [494-515]			1996.972373806650 [300-316]
3795.774358779930	2354.252027766050 [494-515] Mox			2028.958428072440
3809.817392231320	2366.245251617560			2047.063926440660
	2406.200614808900 [371-393]			2064.113031198330
	2422.199794545030 [371-393] Mox			2106.977207867200 [50-68]

**Supplemental table 2d (continued)**

HSP70 protein 9 (continued)	Heterogeneous nuclear ribonucleoprotein H1 (continued)
2691.288865819760	2142.018220220460 [356-375]
2705.153445353620	2150.071510137120
2720.278884844440	2184.102465166310
2748.312855594790	2211.104000000020
2807.313439536160	2225.115492877820
2932.512316860940	2230.193469854970
3323.734010894070	2283.168546033650
3337.758128645840	2286.113656303920
	2501.242129037360
	2663.266002974670
	2677.289033392010
	2691.285605848680
	2705.192160512350
	2720.270106346970
	2748.303734092790
	2807.308833804510
	2932.508902794600
	3052.614615471770
	3323.750659553380
	3337.757999999990
	3348.607227459420
	3794.822396622260
	3808.827819141030

**Supplemental table 2e**

Decapping enzyme scavenger & Upstream binding protein 1	Protein disulfide isomerase family A member 3	Tissue specific transplantation antigen P35B	Seryl-tRNA-synthetase	GNAS complex locus
679.465340494431	834.513770164313	842.508610627300	842.509340939768	842.509391877895
699.375529060546	842.519676860717	850.534552126170	882.573149098836	850.542588437109
713.396527049349	848.535229494765	868.540598925432	990.561117841936	868.548939092624
768.542190775593	850.557339392614	882.570017402716	1074.505185971680 [294-302]	882.574222590017
821.483159140572 [316-322]	864.563516204118	911.465635283327 [291-297]	1277.709591189720	982.592487680978
823.443723002823 [42-48]	868.566495477565	996.600098713994	1307.675676412360	996.603523485151
842.510487626914	882.586171285958	1013.486741562240 [82-88]	1332.750458473730	1051.720552164200
850.541640716502	968.579732088056	1051.707943209610	1415.758086703030	1065.626003057570
868.544247927616	982.597277414859	1120.549688547540	1465.533870581620	1087.649029376290
870.538795813856	996.615462379069	1151.720980348250	1475.754545026500	1120.540215203530
882.573265788870	1051.727856110660	1165.742062793820	1504.766959492390 [219-230]	1151.725245758970
927.492027483531	1058.570424480280	1179.603275220230	1510.788405103390 [282-293]	1165.748351647910
960.558879787972	1151.741078968910	1234.674410075920	1517.842922645350	1185.685178016770
996.606308411580	1165.761184159780	1274.719628835220	1520.751313465360 [219-230] Mox	1229.699326714210
1036.527973284180	1172.545307145280 [336-344]	1277.711132116970	1522.717015989370	1231.663230017460
1045.561555903720	1234.676938911260	1279.767617618420	1565.775245047380 [377-390]	1257.646368280350
1051.720714516970	1265.760415592180	1307.674993003640	1579.768293235800	1274.713234244800
1165.749800485530	1274.724867181370	1357.708609137560	1638.861074890490	1277.712582072450
1179.601441110830	1277.712477593300	1434.815545000690	1682.919082127720 [267-281]	1279.776389883130
1218.641409811890	1279.784060922590	1475.751085058460	1693.871668945610 [376-390]	1312.607449270820
1234.674379283120	1307.681593959150	1489.735012463080 [200-214]	1707.778412179670	1334.896927414850
1274.724958449720	1334.897151750370	1521.684684850520	1837.948784696760	1357.721264235960
1277.706599488210	1341.693295275660 [449-460]	1638.862386447280	1844.954569387590	1415.756231397410
1279.765165205950	1352.685910190320	1707.780415686950	1851.926458212340	1467.730617544590
1303.733209823080 [232-242]	1357.712062261190	1716.848424719000	1993.977369430660	1521.673060301390
1307.680092720930	1370.696809636610 [472-482]	1838.921335622040	2150.083857182030	1575.789100519880
1311.733888536560 [388-399]	1419.738685234770	1851.924781006660	2211.106780409200	1638.857136413300
1314.672177961280	1434.860111987580	1946.068843379530 [61-78]	2225.121657749140	1707.767260116570
1357.718920124120	1448.922588063940	1993.978265328150	2230.205770182330	1794.814953143920
1434.763304547300	1475.752234662780	2135.103474850100	2273.017574676420	1796.822849597980
1467.844817294630	1497.744403932900	2150.077385221210	2283.176498861960	1844.942597297640 [59-74]
1475.751331715070	1515.757022431220 [352-363]	2211.107299199650	2286.119561040270	1935.885053228890
1493.735971512620	1529.742532944330	2225.119759592090	2345.089250502430	1968.944344466430
1519.832507993110 [425-436] [243-255]	1543.754286892770	2230.209288710090	2501.250783722960	1993.976365950600
1529.734355064040	1638.853939331620	2283.176886301720	2663.263123540370	2024.009368649510 [198-214]
1638.872651079080	1645.867847342470 [290-304]	2399.032847047370	2677.270721888410	2132.977580916330
1640.857452259400	1707.766790549730	2501.248471606160	2689.328173346340 [134-157]	2150.071267413300
1649.821921986160 [276-289]	1794.802734028250	2663.265538983970	2692.290342592150	2182.990542326000 [343-359]
1657.789963701620 [14-28]	1826.778320534770	2677.288331414670	2705.162101366260	2211.106636023120
1707.770086483290	1838.912284095530	2691.294514015920	2720.282190194310	2225.119675951960
1833.894839837310	1851.918071127870	2705.180598360180	2748.311960299870	2233.084990787240
1838.927079688580	1993.968056557190 [21-38]	2720.287934891810	2807.311138281730	2249.050496789710
1878.937501094050 [295-310]	2136.093664342970	2748.299838694940	2932.512616368410	2283.177825411390
1892.851941957760	2150.063227063800	2807.316634622520	3264.503714032730	2286.060791690920
1899.989323142370	2184.106005670410	2872.400641253170	3323.734532389820	2343.952141796550
1993.978544440370 [180-196]	2211.089845055600	2932.521010217940	3337.758310347420	2399.018248251940
2150.075125980270 [179-196]	2225.108246677870	3052.622941510170	3348.597832727900	2425.147852213440
2211.104623594450	2230.194113717480	3323.754440191560		2501.247149899940
2225.123115824980	2283.161362959950	3337.758238543940		2705.161548461380

**Supplemental table 2e (continued)**

Decapping enzyme scavenger & Upstream binding protein 1 (continued)	Protein disulfide isomerase family A. member 3 (continued)	Tissue specific transplantation antigen P35B (continued)	GNAS complex locus (continued)
2230.211280680300	2286.083035267890	3349.633453341440	<b>2872.388486012870</b> [114-137]
2256.042558409640	2298.169394483450	3794.830102802510	3052.625878469050
2283.178402413280	2398.994126608960	3808.820807943330	3323.748509065580
2292.107096945280	2501.227820352800		3337.758080734550
2297.186423144640	2566.249020628890		
2663.261878844250	<b>2575.277944138240</b> [306-329]		
2677.272938937200	2584.179206786680		
2691.291825162020	2663.245618856290		
2705.181880380450	2691.261082362970		
2709.297693230880	2703.344183489000		
2720.276660928390	2705.128017863330		
2723.237554000420	2720.257031962280		
2748.312256209200	2748.278988818170		
2759.384321292480	2807.285489657230		
2792.345772423680	2872.368845339240		
2807.314108349180	2932.483161806710		
<b>2825.323937523750</b> [78-100]	3048.448612587650		
2872.390697682100	3052.595128642760		
2921.341388776520	3323.710745943370		
2932.353756281110	3337.724413782140		
2935.465045991470	3346.635651113530		
2949.346198962860	3457.600383550100		
2967.343688167060	3808.774715988830		
2971.325974045040			
3052.627961839410			
3121.464521864390			
3303.613854162270			
3312.315485211710			
3323.741604606700			
3332.626383673300			
3337.757944959490			
3339.441365648880			
<b>3348.611772727880</b> [262-289]			
3353.680732627340			
3366.611484603620			
3794.820408357890			
3808.833178736770			