

Table S6

Table S6 Analysis of N-termini that were unmodified upon secretome harvest and chemically dimethylated in the TAILS procedure (replicate 2).

This is a non-redundant, peptide-centric list, showing up to three proteins for each peptide identification.

The X! Tandem hyperscore and the mass deviation in ppm are shown.

The overall FDR is < 0.05 as calculated by PeptideProphet.

The prime sequence was experimentally identified, the corresponding non-prime sequence was bioinformatically derived.

The fold-change (Fc) value is based on ASAPratio.

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|---------------------------|-------------|------|------|--|---------------------------------|-----------------------|----------------------|------|
| M | VQAWYMDDAPGDPR | MTND_HUMAN | | | 1,2-dihydroxy-3-keto-5-methylthiopentene | 0.86 | 0.05 | 63.30 | 1.39 |
| M | VDREQLVQKAR | 1433G_HUMAN | | | 14-3-3 protein gamma; | -1.00 | 0.08 | 55.70 | 0.84 |
| ALLRPGLDR | KIHIDL PNEQAR | PRS10_HUMAN | | | 26S protease regulatory | 1.17 | 0.05 | 38.80 | 1.60 |
| PGTGKTLAK | AVANQTSATFLR | PRS4_HUMAN | | | 26S protease regulatory subunit 4; | 0.91 | 0.05 | 59.10 | 3.36 |
| ARIMQIHSRK | MNVSPDVNYEELAR | PRS6A_HUMAN | | | 26S protease regulatory subunit 6A; | 0.67 | 0.06 | 52.30 | 6.54 |
| IMQIHSRKMN | VSPDVNYEELAR | PRS6A_HUMAN | | | 26S protease regulatory | 0.42 | 0.04 | 37.80 | 1.33 |
| QVKVIAATNR | VDILD PALLR | PRS6A_HUMAN | | | 26S protease regulatory subunit 6A; | 0.28 | 0.02 | 29.60 | 5.09 |
| ATVWDEAEQD | GIGEEVLKMSTEEIQR | PRS6A_HUMAN | | | 26S protease regulatory subunit 6A; | -0.72 | 0.04 | 60.10 | 3.55 |
| NVKVIMATNR | ADTLD PALLR PGR | PRS6B_HUMAN | | | 26S protease regulatory | 0.28 | 0.01 | 23.30 | 2.10 |
| KCVAQASKNR | SLADFEKALTDYR | PSD11_HUMAN | | | 26S proteasome non-ATPase regulatory subunit | 1.12 | 0.08 | 25.60 | 3.82 |
| M | VLESTMVCVDNSEYMR | PSMD4_HUMAN | | | 26S proteasome non-ATPase regulatory subunit | 0.74 | 0.08 | 89.30 | 6.07 |
| TEDSDDALLK | MTISQQEFGFR | PSMD4_HUMAN | | | 26S proteasome non- | 0.30 | 0.02 | 35.90 | 3.10 |
| EDEEDDYQK | RKGVEGLIDIENPNR | HAP28_HUMAN | | | 28 kDa heat- and acid- | -0.62 | 0.05 | 52.20 | 3.31 |
| PQLSPAGKRY | LLSSAYVDSHKWEAR | RT27_HUMAN | | | 28S ribosomal protein S27, mitochondrial; | 0.91 | 0.06 | 36.90 | 4.17 |
| SGWMPQAAPC | LSGAPQASAADV VVVHGR | THIK_HUMAN | | | 3-ketoacyl-CoA thiolase, | -1.24 | 0.12 | 48.90 | 6.16 |
| GEADRDTYRR | SAVPPGADKKA EAGAGSATEFQFR | RS10_HUMAN | | | 40S ribosomal protein | 1.37 | 0.11 | 58.80 | 2.28 |
| RGEADRDTYR | RSVPPGADKKA EAGAGSATEFQF | RS10_HUMAN | | | 40S ribosomal protein | 1.05 | 0.06 | 41.30 | 2.43 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|---------------------------|-------------|------|------|----------------------------------|---------------------------------|-----------------------|----------------------|-------|
| GEFEIIDDHR | AGKIVVNLTR | RS15A_HUMAN | | | 40S ribosomal protein S15a; | 1.74 | 0.13 | 34.90 | -9.60 |
| IVRFLTVMK | HGYIGEFEIIDDHR | RS15A_HUMAN | | | 40S ribosomal protein S15a; | 0.79 | 0.07 | 42.70 | -2.20 |
| QKYVDEASKK | EIKDILIQYDR | RS16_HUMAN | | | 40S ribosomal protein S19; | 0.59 | 0.04 | 40.30 | 0.81 |
| MP | GVTVKDVNQEFVR | RS19_HUMAN | | | 40S ribosomal protein S19; | 0.20 | 0.01 | 39.30 | -1.07 |
| MAFK | DTGKTPVEPEVAIHR | RS20_HUMAN | | | 40S ribosomal protein S20; | 0.74 | 0.05 | 39.20 | 0.76 |
| MAFKD | TGKTPVEPEVAIHR | RS20_HUMAN | | | 40S ribosomal protein S20; | -0.55 | 0.02 | 33.60 | 0.50 |
| MQN | DAGEFVDLYVPR | RS21_HUMAN | | | 40S ribosomal protein S21; | -0.11 | 0.01 | 61.00 | 3.76 |
| MQND | AGEFVDLYVPR | RS21_HUMAN | | | 40S ribosomal protein S21; | -1.14 | 0.08 | 36.70 | 2.23 |
| IIRNVKGPVR | EGDVLTLLESER | RS28_HUMAN | | | 40S ribosomal protein S28; | 0.50 | 0.12 | 51.80 | 3.02 |
| M | GHQQLYWSHPR | RS29_HUMAN | | | 40S ribosomal protein S29; | 0.86 | 0.05 | 44.70 | 2.36 |
| RKQVADGIFK | AELNEFLTR | RS3_HUMAN | | | 40S ribosomal protein S3; | 1.20 | 0.10 | 36.50 | 2.66 |
| YEKRMATEVA | ADALGEEWKGYVVR | RS6_HUMAN | | | 40S ribosomal protein S6; | -0.07 | 0.00 | 30.70 | 5.17 |
| MNSDLKAQLR | ELNITAAKEIEVGGGR | RS7_HUMAN | | | 40S ribosomal protein S7; | 0.84 | 0.06 | 31.30 | -0.46 |
| RNTGQRAVLK | FAAATGATPIAGR | RSSA_HUMAN | | | 40S ribosomal protein SA; | 0.64 | 0.06 | 51.30 | 1.87 |
| EMRMQNNSSP | SISPNTSFTSDGSPSPLGGIKR | XRN2_HUMAN | | | 5'-3' exoribonuclease 2; | 0.40 | 0.02 | 56.10 | 4.82 |
| AAYEMRMQNN | SSPSISPNTSFTSDGSPSPLGGIKR | XRN2_HUMAN | | | 5'-3' exoribonuclease 2; | -0.40 | 0.03 | 35.20 | -0.75 |
| LVIQQVFDNG | SIYNPEVLDITEETLHSR | RLA0_HUMAN | | | 60S acidic ribosomal protein P0; | 0.67 | 0.04 | 81.80 | 2.00 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|----------------------|-------------|------------|------|-----------------------------------|---------------------------------|-----------------------|----------------------|-------|
| IQQVFDNGSI | YNPEVLDITEETLHSR | RLA0_HUMAN | | | 60S acidic ribosomal protein P0; | -2.24 | 0.11 | 33.80 | 4.71 |
| HISKKWGFTK | FNADEFEDMVAEKR | RL10_HUMAN | | | 60S ribosomal protein L10; | -0.88 | 0.08 | 28.90 | 5.80 |
| VGESGDLRTR | AAKVLEQLTGQTPVFSKAR | RL11_HUMAN | | | 60S ribosomal protein | 0.54 | 0.04 | 41.10 | 1.41 |
| SGDRLTRAAK | VLEQLTGQTPVFSKAR | RL11_HUMAN | | | 60S ribosomal protein | 0.43 | 0.03 | 26.90 | -0.98 |
| KGDSSAEELK | LATQLTGPVMPVR | RL13_HUMAN | | | 60S ribosomal protein L13; | 0.46 | 0.04 | 44.20 | 2.96 |
| ISVDPRRRNK | STESLQANVQR | RL13_HUMAN | | | 60S ribosomal protein L13; | 0.04 | 0.01 | 59.50 | 2.60 |
| | M GAYKYIQELWR | RL15_HUMAN | | | 60S ribosomal protein | 1.09 | 0.03 | 41.90 | 1.47 |
| KMKLPGRENK | TAVVVGTITDDVR | RL18_HUMAN | | | 60S ribosomal protein L18; | 0.54 | 0.05 | 72.10 | 3.84 |
| GTHNMYREYR | DLTTAGAVTQCYR | RL18A_HUMAN | | | 60S ribosomal protein L18a; | 0.67 | 0.07 | 67.80 | 2.96 |
| | M KFNPFVTSDR | RL26L_HUMAN | RL26_HUMAN | | 60S ribosomal protein L26-like 1; | 0.33 | 0.02 | 32.00 | 0.64 |
| QTRVNAAKNK | TGAAPIIDVVR | RL27A_HUMAN | | | 60S ribosomal protein L27a; | 0.61 | 0.06 | 47.30 | 6.37 |
| FRYNGLIHRK | TVGVEPAADGKGVVVVIKR | RL28_HUMAN | | | 60S ribosomal protein | 1.03 | 0.04 | 45.90 | 0.40 |
| RRALEKIDLK | FIDTTSKFGHGR | RL3L_HUMAN | RL3_HUMAN | | 60S ribosomal protein L3- | 1.06 | 0.11 | 54.60 | 7.80 |
| KKGGEKKKGR | SAINEVVTR | RL31_HUMAN | | | 60S ribosomal protein L31; | 0.30 | 0.03 | 40.60 | 1.17 |
| AKKGGEKKKG | RSAINVVTR | RL31_HUMAN | | | 60S ribosomal protein | -0.49 | 0.05 | 32.40 | 2.46 |
| RGKKKEELLK | QLDDLKVELSQLR | RL35_HUMAN | | | 60S ribosomal protein | -0.04 | 0.00 | 24.70 | 5.90 |
| KSNYNLPMHK | MINTDLR | RL4_HUMAN | | | 60S ribosomal protein L4; | 0.86 | 0.09 | 23.70 | 0.51 |
| FKKKKLRKPR | HQEGEIFDTEKEKYEITEQR | RL6_HUMAN | | | 60S ribosomal protein L6; | 0.18 | 0.01 | 38.00 | 3.63 |
| RGYGKINKKR | IALTDNALIAR | RL7_HUMAN | | | 60S ribosomal protein L7; | 4.37 | 0.39 | 45.00 | 1.83 |
| QRLLARAEKK | AAGKGDVPTKRPPVLR | RL7A_HUMAN | | | 60S ribosomal protein | 1.18 | 0.08 | 23.00 | 7.76 |
| SKKVISSANR | AVVGVVAGGGR | RL8_HUMAN | | | 60S ribosomal protein L8; | 0.94 | 0.07 | 48.30 | 2.16 |
| KPGDRGKLAR | ASGNYATVISHNPETKKTR | RL8_HUMAN | | | 60S ribosomal protein L8; | 0.67 | 0.05 | 46.30 | 3.29 |

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| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|-------------|-----------------------------|-------------|------------|-------------|--|---------------------------------|-----------------------|----------------------|-------|
| M | KTILSNQTVDIPENV DITLKGR | RL9_HUMAN | | | 60S ribosomal protein L9; | 0.42 | 0.02 | 46.50 | 4.08 |
| GTIAGLNVMR | IINEPTAAAIAYGLDKR | GRP78_HUMAN | | | 78 kDa glucose-regulated protein; | 4.35 | 0.34 | 47.90 | 3.15 |
| EIIANDQGNR | ITPSYVAFTPEGER | GRP78_HUMAN | | | 78 kDa glucose-regulated A-kinase anchor protein | 0.68 | 0.06 | 50.10 | 4.57 |
| SKELSESQVH | MMAAAVADGTR | AKA12_HUMAN | | | 12; | 1.73 | 0.17 | 43.50 | 0.27 |
| EPLQVEAEA | ALLTEEVLER | AKA12_HUMAN | | | A-kinase anchor protein | 1.41 | 0.10 | 40.00 | 1.57 |
| ISASVTEPLE | QVEAEAALLTEEVLER | AKA12_HUMAN | | | A-kinase anchor protein | 0.91 | 0.13 | 85.90 | 1.91 |
| KDVPFEGLE | GSIDTGITVSR | AKA12_HUMAN | | | A-kinase anchor protein | 0.66 | 0.06 | 52.30 | 1.67 |
| QERRTQEV LQ | AVA EKVK EESQLPGTGGPEDV LQP | AKA12_HUMAN | | | A-kinase anchor protein | 0.17 | 0.01 | 37.80 | 3.05 |
| RTQEV LQAVA | EKVKEESQLPGTGGPEDV LQP VQF | AKA12_HUMAN | | | A-kinase anchor protein | -0.34 | 0.01 | 48.60 | 3.60 |
| MN | AGSDPVVIVSAAR | THIC_HUMAN | | | Acetyl-CoA | 0.97 | 0.04 | 46.90 | -0.47 |
| QEIRYVERSY | VSKPTLKEVVIVSATR | THIL_HUMAN | | | Acetyl-CoA acetyltransferase, | 0.02 | 0.00 | 41.10 | 7.43 |
| VEWIIIDPEG | FTENGWEIVHRPAR | ACHD_HUMAN | | | Acetylcholine receptor subunit delta; | 3.79 | 0.27 | 31.10 | 8.18 |
| KTGVSKPIVK | STLSQTVPSKGELSR | ANLN_HUMAN | | | Actin-binding protein | 1.70 | 0.08 | 32.80 | 3.58 |
| DDGSTLMEID | GDKGKQGGPTYIIDTNALR | ACL6A_HUMAN | | | Actin-like protein 6A; | -0.88 | 0.08 | 48.30 | 1.90 |
| M | ILLEVNNR | ARPC2_HUMAN | | | Actin-related protein 2/3 complex subunit 2; | 0.13 | 0.01 | 37.20 | 1.85 |
| VFPSIVGRPR | HQGV MVGMGQKDSYVGDEAQSK | ACTA_HUMAN | ACTB_HUMAN | ACTC_HUMAN | Actin, aortic smooth muscle; | 0.96 | 0.09 | 66.60 | 1.88 |
| AGFAGDDAPR | AVFPSIVGR | ACTB_HUMAN | ACTA_HUMAN | ACTC_HUMAN | Actin, cytoplasmic 1; | 2.05 | 0.08 | 34.10 | 0.72 |
| AGFAGDDAPR | AVFPSIVGRPR | ACTB_HUMAN | ACTA_HUMAN | ACTBM_HUMAN | Actin, cytoplasmic 1; | 1.64 | 0.04 | 22.40 | 5.05 |
| WHHTFYNELR | VAPEEHPVLLTEAPLNPKANR | ACTB_HUMAN | ACTG_HUMAN | | Actin, cytoplasmic 1; | 0.96 | 0.06 | 59.40 | 1.31 |
| YPGIADRMQK | EITALAPSTMKIKIIPPER | ACTB_HUMAN | ACTA_HUMAN | ACTC_HUMAN | Actin, cytoplasmic 1; | 0.78 | 0.05 | 33.90 | 4.51 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|----------------------------|------------|-------------|-------------|-----------------------|---------------------------------|-----------------------|----------------------|------|
| DYLMKILTER | GYSFTTTAER | ACTB_HUMAN | ACTG_HUMAN | | Actin, cytoplasmic 1; | 0.61 | 0.06 | 36.90 | 1.88 |
| DFEQEMATVA | SSSSLEKSYELPDGQVITIGNER | ACTB_HUMAN | ACTA_HUMAN | ACTC_HUMAN | Actin, cytoplasmic 1; | 0.45 | 0.03 | 75.20 | 3.84 |
| VIDNGSGMCK | AGFAGDDAPR | ACTB_HUMAN | ACTA_HUMAN | ACTC_HUMAN | Actin, cytoplasmic 1; | 0.43 | 0.02 | 27.40 | 7.32 |
| VDIRKDLYAN | TVLSGGTTMYPGIADR | ACTB_HUMAN | ACTG_HUMAN | | Actin, cytoplasmic 1; | 0.43 | 0.04 | 85.30 | 6.03 |
| FEQEMATVAS | SSSLEKSYELPDGQVITIGNER | ACTB_HUMAN | ACTA_HUMAN | ACTC_HUMAN | Actin, cytoplasmic 1; | 0.38 | 0.02 | 62.90 | 3.65 |
| LYANNVMSGG | TTMYPGIADR | ACTB_HUMAN | ACTA_HUMAN | ACTC_HUMAN | Actin, cytoplasmic 1; | 0.35 | 0.03 | 27.30 | 2.50 |
| TVASSSSLEK | SYELPDGQVITIGNER | ACTB_HUMAN | ACTA_HUMAN | ACTBL_HUMAN | Actin, cytoplasmic 1; | 0.30 | 0.01 | 93.40 | 3.45 |
| VMDSGDGVTH | TVPIYEGYALPHAILR | ACTB_HUMAN | ACTG_HUMAN | | Actin, cytoplasmic 1; | 0.30 | 0.01 | 67.30 | 2.16 |
| QEMATVASSS | SLEKSYELPDGQVITIGNER | ACTB_HUMAN | ACTA_HUMAN | ACTC_HUMAN | Actin, cytoplasmic 1; | 0.22 | 0.01 | 75.80 | 1.73 |
| IRKDLYANNV | LSGGTTMYPGIADR | ACTB_HUMAN | ACTA_HUMAN | ACTC_HUMAN | Actin, cytoplasmic 1; | 0.17 | 0.02 | 51.60 | 5.02 |
| VALDFEQEMA | TAASSSSLEKSYELPDGQVITIGNEI | ACTB_HUMAN | ACTA_HUMAN | ACTC_HUMAN | Actin, cytoplasmic 1; | 0.15 | 0.01 | 86.80 | 5.23 |
| VAPEEHPI | TEAPLNPKANR | ACTB_HUMAN | ACTA_HUMAN | ACTBM_HUMAN | Actin, cytoplasmic 1; | 0.11 | 0.01 | 24.60 | 2.34 |
| EMATVASSSS | LEKSYELPDGQVITIGNER | ACTB_HUMAN | ACTA_HUMAN | ACTC_HUMAN | Actin, cytoplasmic 1; | 0.09 | 0.00 | 62.30 | 4.12 |
| EQEMATVASS | SSLEKSYELPDGQVITIGNER | ACTB_HUMAN | ACTA_HUMAN | ACTC_HUMAN | Actin, cytoplasmic 1; | 0.00 | 0.00 | 53.60 | 3.09 |
| SGRTTGIVMD | SGDGVTHTVPIYEGYALPHAILR | ACTB_HUMAN | ACTG_HUMAN | | Actin, cytoplasmic 1; | -0.11 | 0.01 | 45.00 | 2.08 |
| YANNVMSGGT | TMYPGIADR | ACTB_HUMAN | ACTA_HUMAN | ACTBL_HUMAN | Actin, cytoplasmic 1; | -0.26 | 0.02 | 28.00 | 4.75 |
| LRVAPEEHPI | LLTEAPLNPKANR | ACTB_HUMAN | ACTA_HUMAN | ACTBM_HUMAN | Actin, cytoplasmic 1; | -0.58 | 0.04 | 24.20 | 2.99 |
| | SLEKSYELPDGQVITIGNER | ACTB_HUMAN | ACTA_HUMAN | ACTBL_HUMAN | Actin, cytoplasmic 1; | -0.69 | 0.07 | 40.90 | 1.52 |
| DIRKDLYANN | VLSGGTTMYPGIADR | ACTB_HUMAN | ACTA_HUMAN | ACTC_HUMAN | Actin, cytoplasmic 1; | -1.29 | 0.13 | 38.30 | 6.93 |
| SGDGVTHTVP | IYEGYALPHAILR | ACTB_HUMAN | ACTBL_HUMAN | ACTG_HUMAN | Actin, cytoplasmic 1; | -1.87 | 0.07 | 51.00 | 0.39 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|-------------|----------------------|-------------|-------------|-------------|---|---------------------------------|-----------------------|----------------------|-------|
| MATVASSSSL | EKSYELPDGQVITIGNER | ACTB_HUMAN | ACTA_HUMAN | ACTBM_HUMAN | Actin, cytoplasmic 1; | -2.05 | 0.09 | 34.90 | 6.99 |
| TTGIVMDSGD | GVTHTVPIYEGYALPHAILR | ACTB_HUMAN | ACTG_HUMAN | | Actin, cytoplasmic 1; | -2.24 | 0.11 | 29.70 | 0.58 |
| GAASQKKAFR | SSGFGLEFNSFQHQLR | TRIP4_HUMAN | | | Activating signal cointegrator 1; | 1.06 | 0.07 | 35.90 | 6.00 |
| IVEERADATN | VNNWHWTER | AHSA1_HUMAN | | | Activator of 90 kDa heat shock protein ATPase | 0.81 | 0.02 | 28.50 | 0.39 |
| PRWIVEERAD | ATNVNNWHWTER | AHSA1_HUMAN | | | Activator of 90 kDa heat shock protein ATPase | -1.14 | 0.05 | 34.40 | 0.70 |
| GRVTQLCRQY | SDMPPLTLEGIQDR | ACPM_HUMAN | | | Acyl carrier protein, mitochondrial; | 0.02 | 0.00 | 71.70 | 1.06 |
| GQIIRVPARM | AATLILEPAGR | ACOT1_HUMAN | ACOT2_HUMAN | | Acyl-coenzyme A thioesterase 1; | 1.19 | 0.12 | 37.70 | 1.31 |
| MERQVLL | SEPEEAAALYR | ACPH_HUMAN | | | Acylamino-acid-releasing enzyme; | 0.76 | 0.04 | 48.20 | 10.07 |
| NDSLSSLDLFD | DDDVDLSR | APC_HUMAN | | | Adenomatous polyposis | -3.24 | 0.31 | 21.40 | 7.84 |
| MSDKLPYK | VADIGLAAWGR | SAHH_HUMAN | | | Adenosylhomocysteinase; | 0.63 | 0.05 | 39.40 | 2.59 |
| DIGLAAWGRK | ALDIAENEMPGLMR | SAHH_HUMAN | | | Adenosylhomocysteinase; | 0.60 | 0.05 | 67.40 | 3.14 |
| RATDVMIAGK | VAVVAGYGDVGKGAQALR | SAHH_HUMAN | | | Adenosylhomocysteinase; | 0.40 | 0.04 | 30.60 | 6.48 |
| M | APSVPAAEPEYPKGIR | KAD2_HUMAN | | | Adenylate kinase 2, mitochondrial; | -0.04 | 0.00 | 27.00 | 0.06 |
| MAP | SVPAAEPEYPKGIR | KAD2_HUMAN | | | Adenylate kinase 2, | -1.00 | 0.08 | 21.50 | 2.59 |
| IKKRLETYYK | ATEPVIAFYEKR | KAD1_HUMAN | | | Adenylate kinase | 0.15 | 0.01 | 17.90 | 2.43 |
| LALAVGCVFL | LEPELPGSALR | ADPGK_HUMAN | | | ADP-dependent glucokinase; | 1.11 | 0.08 | 33.90 | 2.23 |
| FLALAVGCVF | LLEPELPGSALR | ADPGK_HUMAN | | | ADP-dependent glucokinase; | 0.72 | 0.07 | 33.40 | 2.34 |
| AIQLVSLGGR | QLLTPEHVLR | AGRIN_HUMAN | | | Agrin; | 7.32 | 0.57 | 28.20 | -0.16 |
| VGAGLRGCIR | LLDVNNQR | AGRIN_HUMAN | | | Agrin; | 4.00 | 0.17 | 26.40 | -0.50 |
| IRLLDVNNQR | LELGIGPGAATR | AGRIN_HUMAN | | | Agrin; | 3.54 | 0.30 | 41.00 | 2.28 |

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| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|--------------------|-------------|-------------|-------------|--|---------------------------------|-----------------------|----------------------|-------|
| DLGKGAAVIR | SREPVTLGAWTR | AGRIN_HUMAN | | | Agrin; | 1.59 | 0.06 | 56.70 | -0.14 |
| PHCEKGLVEK | SAGDVTDLAFDGR | AGRIN_HUMAN | | | Agrin; | -1.59 | 0.10 | 52.30 | -2.96 |
| RRLDALSRGR | LLHQLADLVER | AL1A3_HUMAN | | | Aldehyde dehydrogenase family 1 member A3; | 2.18 | 0.28 | 33.90 | 3.89 |
| IKAIAAKHNK | TTAQVLIR | AK1BF_HUMAN | ALDR_HUMAN | | Aldo-keto reductase family 1 member B15; | 0.26 | 0.02 | 29.50 | 0.85 |
| LGLRLQLSLG | IIPVEEENPDFWNR | PPB1_HUMAN | PPBN_HUMAN | | Alkaline phosphatase, Alpha-1- | 0.00 | 0.00 | 73.00 | 6.04 |
| AAGFCPAVLC | HPNSPLDEENLTQENQDR | AACT_HUMAN | | | antichymotrypsin; | 1.67 | 0.08 | 76.30 | 1.43 |
| ILTLVVAACG | FVLWSSNGR | MGAT2_HUMAN | | | Alpha-1,6-mannosylglycoprotein 2-beta-N- | 1.95 | 0.10 | 27.40 | 0.91 |
| VTFGFIWGMM | LLHFTIQQR | MGT5A_HUMAN | | | Alpha-1,6-mannosylglycoprotein 6- | 0.28 | 0.02 | 27.90 | 2.19 |
| HTNYTMEHIR | VGWEQLLTTIAR | ACTN1_HUMAN | ACTN4_HUMAN | | Alpha-actinin-1; | 4.67 | 0.70 | 48.80 | 1.41 |
| WEQLLTTIAR | TINEVENQILTR | ACTN1_HUMAN | ACTN4_HUMAN | | Alpha-actinin-1; | 2.37 | 0.24 | 67.30 | 0.21 |
| HLMEDYEKLA | SDLLEWIR | ACTN1_HUMAN | ACTN4_HUMAN | | Alpha-actinin-1; | -0.21 | 0.01 | 32.60 | -0.19 |
| QHLEQAEKGY | EEWLLNEIR | ACTN1_HUMAN | ACTN2_HUMAN | ACTN4_HUMAN | Alpha-actinin-1; | -5.06 | 1.69 | 35.10 | 6.79 |
| LLNEIRRLER | LEHLAEKFR | ACTN2_HUMAN | | | Alpha-actinin-2; | 6.64 | 0.75 | 29.50 | 1.83 |
| TADQVIASFK | VLAGDKNFITAELR | ACTN4_HUMAN | | | Alpha-actinin-4; | 0.90 | 0.07 | 25.80 | 2.60 |
| EIGRISIEMN | GTLEDQLSHLKQYER | ACTN4_HUMAN | | | Alpha-actinin-4; | -0.32 | 0.02 | 40.20 | 2.44 |
| NIQNFTTSWR | DGLAFNALIHR | ACTN4_HUMAN | SPTN4_HUMAN | | Alpha-actinin-4; | -0.65 | 0.04 | 48.00 | 0.55 |
| NTRCQKICDQ | WDALGSLTHSR | ACTN4_HUMAN | | | Alpha-actinin-4; | -2.14 | 0.19 | 36.20 | 4.46 |
| LAFNALIHRH | RPELIEYDKLR | ACTN4_HUMAN | | | Alpha-actinin-4; | -2.24 | 0.21 | 49.60 | 1.20 |
| KAIMTYVSSF | YHAFSGAQKAETAANR | ACTN4_HUMAN | ACTN1_HUMAN | | Alpha-actinin-4; | -3.24 | 0.31 | 34.70 | 3.01 |
| GRLGVSLSKG | LHHKAVLAVR | AASS_HUMAN | | | Alpha-aminoadipic semialdehyde synthase, | 8.88 | 1.39 | 26.20 | 7.66 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|--------------------------|-------------|-------------|------------|--------------------------|---------------------------------|-----------------------|----------------------|-------|
| DLYTAKGLFR | AAVPSGASTGIYEALELR | ENOA_HUMAN | ENOB_HUMAN | ENOG_HUMAN | Alpha-enolase; | 0.92 | 0.05 | 107.80 | 5.89 |
| FRAAVPSGAS | TGIYEALELR | ENOA_HUMAN | ENOB_HUMAN | ENOG_HUMAN | Alpha-enolase; | -0.09 | 0.00 | 32.90 | 4.58 |
| WGAWQKFTAS | AGIQVVGDDLTVTNPKR | ENOA_HUMAN | | | Alpha-enolase; | -0.43 | 0.05 | 51.30 | 2.27 |
| QDDWGAWQKF | TASAGIQVVGDDLTVTNPKR | ENOA_HUMAN | | | Alpha-enolase; | -0.55 | 0.03 | 79.50 | 1.10 |
| DWGAWQKFTA | SAGIQVVGDDLTVTNPKR | ENOA_HUMAN | | | Alpha-enolase; | -0.58 | 0.03 | 70.00 | 2.37 |
| KFGANAILGV | SLAVCKAGAVEKGVPLYR | ENOA_HUMAN | | | Alpha-enolase; | -0.80 | 0.06 | 25.90 | 2.92 |
| WQKFTASAGI | QVVGDDLTVTNPKR | ENOA_HUMAN | | | Alpha-enolase; | -1.65 | 0.10 | 36.90 | 0.62 |
| GAWQKFTASA | GIQVVGDDLTVTNPKR | ENOA_HUMAN | | | Alpha-enolase; | -2.05 | 0.42 | 28.30 | 1.46 |
| KAGYTDKVI | GMDVAASEFFR | ENOA_HUMAN | | | Alpha-enolase; | -3.72 | 0.49 | 44.10 | 1.42 |
| SLLAAPPVAP | AEAPHLVHVDAAR | IDUA_HUMAN | | | Alpha-L-iduronidase; | 0.15 | 0.01 | 72.60 | 0.28 |
| NTWLSTGWFT | MTIALELCDR | SIA7E_HUMAN | | | Alpha-N- | -6.06 | 0.00 | 24.50 | 5.65 |
| VILFALITIL | ILYSSNSANEFHYGSLR | SIA7F_HUMAN | | | Alpha-N- | 0.99 | 0.06 | 35.00 | 3.25 |
| RALTPAATLS | AVQNLVVEGLR | STALP_HUMAN | | | AMSH-like protease; | -1.80 | 0.13 | 34.00 | 0.41 |
| RALEVPTDGN | AGLLAEPQIAMFCGR | A4_HUMAN | | | Amyloid beta A4 protein; | 1.68 | 0.18 | 58.30 | 0.24 |
| LLAAWTARAL | EVPTDGNAGLLAEPQIAMFCGR | A4_HUMAN | | | Amyloid beta A4 protein; | 1.62 | 0.10 | 98.60 | 1.39 |
| LEVPTDGNAG | LLAEPQIAMFCGR | A4_HUMAN | | | Amyloid beta A4 protein; | 1.48 | 0.17 | 54.80 | 6.19 |
| LLLAAWTARA | LEVPTDGNAGLLAEPQIAMFCGR | A4_HUMAN | | | Amyloid beta A4 protein; | 0.74 | 0.12 | 101.70 | 5.18 |
| LLLRAQPAIG | SLAGGSPGAAEAPGSAQVAGLCGF | APLP1_HUMAN | | | Amyloid-like protein 1; | 0.61 | 0.07 | 60.40 | -1.15 |
| AIMVKGVDEA | TIIDILTKR | ANXA1_HUMAN | | | Annexin A1; | -0.19 | 0.01 | 26.90 | 1.58 |
| DADELRAAMK | GLGTDEDTLIEILASR | ANXA1_HUMAN | | | Annexin A1; | -0.46 | 0.07 | 55.20 | 2.30 |
| AALHKAIMVK | GVDEATIIDILTKR | ANXA1_HUMAN | | | Annexin A1; | -0.65 | 0.06 | 43.90 | 3.59 |
| KLMVALAKGR | RAEDGSVIDYELIDQDAR | ANXA2_HUMAN | | | Annexin A2; | 2.58 | 0.11 | 44.50 | 1.29 |
| STVHEILCKL | SLEGDHSTPPSAYGSVKAYTNFDA | ANXA2_HUMAN | AXA2L_HUMAN | | Annexin A2; | -0.34 | 0.02 | 29.50 | 1.99 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|---------------------------|-------------|-------------|------|---|---------------------------------|-----------------------|----------------------|-------|
| TPPSAYGSVK | AYTNFDAER | ANXA2_HUMAN | AXA2L_HUMAN | | Annexin A2; | -0.46 | 0.05 | 29.10 | 0.36 |
| DALNIETAIK | TKGVDEVTIVNILTNR | ANXA2_HUMAN | | | Annexin A2; | -0.46 | 0.02 | 39.40 | 1.41 |
| INRVYKEMYK | TDLEKDIISDTSGDFR | ANXA2_HUMAN | AXA2L_HUMAN | | Annexin A2; | -0.52 | 0.03 | 54.20 | 3.29 |
| HEILCKLSLE | GDHSTPPSAYGSVKAYTNFDAER | ANXA2_HUMAN | AXA2L_HUMAN | | Annexin A2; | -0.69 | 0.07 | 37.90 | 0.24 |
| HSTPPSAYGS | VKAYTNFDAER | ANXA2_HUMAN | AXA2L_HUMAN | | Annexin A2; | -0.69 | 0.06 | 38.60 | -0.44 |
| DHSTPPSAYG | SVKAYTNFDAER | ANXA2_HUMAN | AXA2L_HUMAN | | Annexin A2; | -1.14 | 0.10 | 33.40 | 0.48 |
| ILTNRSNAQR | QDIAFAYQR | ANXA2_HUMAN | | | Annexin A2; | -1.59 | 0.05 | 29.50 | 3.95 |
| VHEILCKLSL | EGDHSTPPSAYGSVKAYTNFDAER | ANXA2_HUMAN | AXA2L_HUMAN | | Annexin A2; | -1.80 | 0.13 | 48.40 | 2.92 |
| ILCKLSLEGD | HSTPPSAYGSVKAYTNFDAER | ANXA2_HUMAN | AXA2L_HUMAN | | Annexin A2; | -2.05 | 0.17 | 55.10 | 4.35 |
| HTLIRVMVSR | SEIDLFNIR | ANXA5_HUMAN | | | Annexin A5; | 2.05 | 0.08 | 48.40 | 4.49 |
| TLRKAMKGLG | TDEESILTLTSLR | ANXA5_HUMAN | | | Annexin A5; | 0.79 | 0.04 | 54.40 | 2.38 |
| DAYELKHALK | GAGTNEKVLTEIIASR | ANXA5_HUMAN | | | Annexin A5; | -1.72 | 0.11 | 33.50 | 4.74 |
| NRRLQTRKEK | AQALEELTGFR | KI67_HUMAN | | | Antigen KI-67; | 0.22 | 0.01 | 43.80 | -5.62 |
| SGLLVDVFS | SASVVAPLAPGSEDNFAR | AP2A2_HUMAN | | | AP-2 complex subunit alpha-2; | -1.80 | 0.19 | 62.70 | 3.35 |
| LTRRSISQQK | SGVSITIDDPVR | ACINU_HUMAN | | | Apoptotic chromatin condensation inducer in | 1.83 | 0.09 | 52.00 | 1.71 |
| KESLPSFK | RKISVVSATKGV PAGNSDTEGGQP | ACINU_HUMAN | | | Apoptotic chromatin | 0.68 | 0.04 | 39.10 | 3.88 |
| KEKSEKKEK | AQEPPAKLLDDLFR | ACINU_HUMAN | | | Apoptotic chromatin condensation inducer in | 0.50 | 0.05 | 33.00 | 2.81 |
| KHHVEVGV | FHIGSGCPDPQAYAQSIADAR | ADC_HUMAN | | | Arginine decarboxylase; | 6.02 | 0.63 | 31.30 | 3.18 |
| M | VLAELYVSDR | SYNC_HUMAN | | | Asparagine--tRNA ligase, | -0.58 | 0.05 | 39.10 | 1.67 |
| IGSARGQSTG | KGPPQSPVFEGVYNNR | ATX2L_HUMAN | | | Ataxin-2-like protein; | 0.57 | 0.02 | 53.80 | 2.62 |
| KPQYVDQIPK | AAKGTVGSILDR | ABCE1_HUMAN | | | ATP-binding cassette sub- | 6.38 | 0.22 | 45.90 | 1.75 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|-------------|--------------------------|-------------|------|------|---|---------------------------------|-----------------------|----------------------|------|
| ALGEAINEYK | GAVIVVSHDAR | ABCF1_HUMAN | | | ATP-binding cassette sub-family F member 1; | 0.75 | 0.06 | 53.10 | 2.51 |
| EEKELMERLK | KLSVPTSDEEDEVPAPKPR | ABCF1_HUMAN | | | ATP-binding cassette sub-family F member 1; | 0.67 | 0.05 | 32.70 | 1.55 |
| LGGIGQFLAK | AIEPPLDAVIEAEHTLR | DHX9_HUMAN | | | ATP-dependent RNA helicase A; | 1.04 | 0.03 | 67.00 | 2.25 |
| VRFLVLDEAD | GLLSQGYSDFINR | DDX1_HUMAN | | | ATP-dependent RNA | -1.87 | 0.14 | 63.60 | 2.26 |
| LLLLPCEAEA | AAAAAAVSGSAAAEAKECDRPCV | ATRN_HUMAN | | | Attractin; | 0.63 | 0.06 | 55.00 | 0.82 |
| PCEAEAAAAA | AAVSGSAAAEAKECDRPCVNGGR | ATRN_HUMAN | | | Attractin; | 0.42 | 0.05 | 23.40 | 2.05 |
| YSGRTQAQTR | QASTLIDRPAPHFER | E41L2_HUMAN | | | Band 4.1-like protein 2; | 2.38 | 0.16 | 41.10 | 0.79 |
| ITPLSLQTQG | SSHETLNIVEEKKR | E41L2_HUMAN | | | Band 4.1-like protein 2; | 0.98 | 0.07 | 37.20 | 1.48 |
| RHQVHGSRLR | LLQVTPADSGEYVCR | PGBM_HUMAN | | | Basement membrane-specific heparan sulfate | 4.54 | 0.54 | 60.20 | 0.92 |
| EETEDYRQFR | KSVLADQGKSFATASHR | BCLF1_HUMAN | | | Bcl-2-associated transcription factor 1; | 1.09 | 0.09 | 43.20 | 2.52 |
| ACLALAAALA | ALLLLPLPLPR | RFNG_HUMAN | | | Beta-1,3-N- | 1.42 | 0.23 | 35.90 | 3.45 |
| AGRDL SRLPQ | LVGVSTPLQGGNSAAAIGQSSGEI | B4GT1_HUMAN | | | Beta-1,4-galactosyltransferase 1; | -0.07 | 0.01 | 72.30 | 2.13 |
| LVGSQLAVMM | YLSLGGFR | B4GT3_HUMAN | | | Beta-1,4-galactosyltransferase 3; | 1.22 | 0.13 | 23.40 | 1.91 |
| LLVGSQAVM | MYLSLGGFR | B4GT3_HUMAN | | | Beta-1,4-galactosyltransferase 3; | 0.81 | 0.03 | 26.50 | 1.21 |
| PTEKDEYACR | VNHVTL SQPK | B2MG_HUMAN | | | Beta-2-microglobulin; | 3.54 | 0.30 | 28.60 | 2.03 |
| KDWSFYLLYY | TEFTPTEKDEYACR | B2MG_HUMAN | | | Beta-2-microglobulin; | 1.12 | 0.10 | 35.50 | 0.94 |
| SNFLNCYVSG | FHPSDIEVDLLKNGER | B2MG_HUMAN | | | Beta-2-microglobulin; | 1.01 | 0.04 | 42.50 | 3.09 |
| ALLSLSGLEA | IQRTPKIQVYSR | B2MG_HUMAN | | | Beta-2-microglobulin; | 0.97 | 0.05 | 26.60 | 2.39 |
| ENGKSNFLNC | YVSGFHPSDIEVDLLKNGER | B2MG_HUMAN | | | Beta-2-microglobulin; | 0.37 | 0.01 | 36.50 | 1.49 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|-------------|-----------------------|-------------|------|------|---|---------------------------------|-----------------------|----------------------|-------|
| GPLLWGCALG | LQGGMLYPQESPSR | BGLR_HUMAN | | | Beta-glucuronidase; | 2.53 | 0.21 | 51.50 | 5.82 |
| AAAFAGRATA | LWPWPQNFQTSQDR | HEXA_HUMAN | | | Beta-hexosaminidase subunit alpha; | 1.36 | 0.01 | 61.70 | 2.78 |
| LALCGAGTTA | AELSYSLR | MANBA_HUMAN | | | Beta-mannosidase; | 1.03 | 0.09 | 23.90 | 1.86 |
| IPEDNADMAR | LDFNLIR | PUR9_HUMAN | | | Bifunctional purine biosynthesis protein | 4.95 | 0.57 | 30.20 | -0.87 |
| KSLFSNVVTK | NKDLPEALR | PUR9_HUMAN | | | Bifunctional purine biosynthesis protein | 0.37 | 0.01 | 34.20 | 5.66 |
| CWVLVGYAKG | GLGDNHVHSSFIYR | BMP5_HUMAN | | | PURH; | 1.70 | 0.15 | 32.00 | 3.68 |
| SYSNTLPVRK | SVTPKNSYATTENKTLPR | BAIP2_HUMAN | | | Bone morphogenetic | 0.56 | 0.06 | 34.10 | 1.75 |
| ASRSKRRAVE | SGVPQPPDPPVQR | BCCIP_HUMAN | | | Brain-specific | 0.31 | 0.01 | 31.70 | 1.92 |
| EDEEWPTLEK | AATMTAAGHHAEEVVDPEDER | BYST_HUMAN | | | BRCA2 and CDKN1A-interacting protein; | 0.93 | 0.08 | 32.50 | 5.63 |
| MIQYNNLNLK | TPVPSDIDISR | C1TC_HUMAN | | | Bystin; | 0.53 | 0.05 | 36.00 | 1.38 |
| MAP | AEILNGKEISAQIR | C1TC_HUMAN | | | C-1-tetrahydrofolate synthase, cytoplasmic; | 0.37 | 0.03 | 24.20 | 2.06 |
| LVYLTQPGNG | NEGSVTGSCYCGKR | CXL16_HUMAN | | | C-1-tetrahydrofolate synthase, cytoplasmic; | 0.28 | 0.02 | 22.80 | 1.34 |
| LTPPGPLASA | GPVSAVLTELK | CXCL6_HUMAN | | | C-X-C motif chemokine 6; | 0.94 | 0.02 | 55.90 | 1.10 |
| PPGPLASAGP | VSAVLTELK | CXCL6_HUMAN | | | C-X-C motif chemokine | 0.53 | 0.05 | 28.60 | 5.71 |
| RAPALSRVRR | AWVIPPISVSENHKKR | CAD15_HUMAN | | | Cadherin-15; | 2.31 | 0.13 | 28.80 | 4.63 |
| FSLFDKDG DG | TITTKELGTVMR | CALM_HUMAN | | | Calmodulin; | 0.53 | 0.04 | 32.40 | 3.20 |
| AFRVFDKDG N | GYISAAELR | CALM_HUMAN | | | Calmodulin; | 0.24 | 0.02 | 41.00 | 1.68 |
| AMRILGGVIS | AISEAAAQYNPEPPPPR | CPNS1_HUMAN | | | Calpain small subunit 1; | 0.43 | 0.01 | 43.80 | 2.87 |
| AAEGLGSHDR | AIKYLNQDYEARL | CAN2_HUMAN | | | Calpain-2 catalytic subunit; | 1.00 | 0.05 | 29.10 | -1.98 |
| SSKTRGIEWK | RPTEICADPQFIIGGATR | CAN2_HUMAN | | | Calpain-2 catalytic subunit; | 0.81 | 0.03 | 52.30 | 3.97 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|---------------------------|-------------|------|------|--|---------------------------------|-----------------------|----------------------|-------|
| FDQTTISLQM | GTNKGASQAGMLAPGTR | CNN3_HUMAN | | | Calponin-3; | 0.90 | 0.08 | 38.40 | 3.28 |
| LLGLLGLAVA | EPAVYFKEQFLDGDGWTSR | CALR_HUMAN | | | Calreticulin; | 0.81 | 0.01 | 28.40 | 2.26 |
| GDLHMTQFFR | GNLAGLTR | CSTN1_HUMAN | | | Calsyntenin-1; | 1.64 | 0.07 | 33.60 | 2.23 |
| YHGIVTENDN | TVLLDPPLIALDKDAPLR | CSTN1_HUMAN | | | Calsyntenin-1; | 1.42 | 0.13 | 33.30 | 4.73 |
| FARAASEFES | SEGVFLFPELR | CSTN1_HUMAN | | | Calsyntenin-1; | 1.29 | 0.15 | 33.10 | -1.21 |
| MTFTGVDTMA | SYEEVLHLLR | CSTN1_HUMAN | | | Calsyntenin-1; | 1.29 | 0.11 | 32.50 | -0.23 |
| APVFKEKSYK | ATVIEGKQYDSILR | CSTN1_HUMAN | | | Calsyntenin-1; | 0.85 | 0.08 | 26.20 | 5.17 |
| NPVVKGRRRR | GAISAEVYTEEDAASYVR | KAP0_HUMAN | | | cAMP-dependent protein | 0.30 | 0.02 | 72.00 | 3.31 |
| ALLLAQTFL | LFLVSRPGPSSPAGGEAR | CHST6_HUMAN | | | Carbohydrate sulfotransferase 6; | 0.64 | 0.05 | 20.90 | 1.97 |
| ALAAALVVHC | YSKSPSNKDAALLEAAR | CLPB_HUMAN | | | Caseinolytic peptidase B protein homolog; | -0.58 | 0.04 | 35.90 | 3.74 |
| CLLVLANARS | RPSFHPLSDELVNYVNKR | CATB_HUMAN | | | Cathepsin B; | 0.68 | 0.01 | 38.70 | 4.48 |
| GGPKPPQRVM | FTEDLKLPAFDAR | CATB_HUMAN | | | Cathepsin B; | 0.15 | 0.01 | 33.20 | 4.35 |
| KPPQRVMFTE | DLKLPAFDAR | CATB_HUMAN | | | Cathepsin B; | -1.40 | 0.11 | 36.00 | 1.69 |
| ADLPKSWDWR | NVDGVNYASITR | CATZ_HUMAN | | | Cathepsin Z; | 3.37 | 0.22 | 41.40 | 4.04 |
| TATACPMKSN | EHDDCQVTNPSTGHFLFDLSSLSGR | MPRI_HUMAN | | | Cation-independent mannose-6-phosphate receptor; | 1.42 | 0.11 | 33.90 | 2.74 |
| AERFMEENEG | HIVDIHDFSLGSSPHVR | CD109_HUMAN | | | CD109 antigen; | 2.38 | 0.12 | 66.30 | 3.34 |
| YAERFMEENE | GHIVDIHDFSLGSSPHVR | CD109_HUMAN | | | CD109 antigen; | 1.22 | 0.09 | 65.20 | 1.80 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|-------------|----------------------|-------------|------|------|--|---------------------------------|-----------------------|----------------------|-------|
| FMEENEGHIV | DIHDFSLGSSPHVR | CD109_HUMAN | | | CD109 antigen; | 1.00 | 0.08 | 39.80 | 2.50 |
| EYAERFMEEN | EGHIVDIHDFSLGSSPHVR | CD109_HUMAN | | | CD109 antigen; | 0.87 | 0.04 | 37.20 | 0.98 |
| SSPGPVEILT | TVTESVTGISR | CD109_HUMAN | | | CD109 antigen; | 0.15 | 0.01 | 31.80 | 0.68 |
| ERFMEENEGH | IVDIHDFSLGSSPHVR | CD109_HUMAN | | | CD109 antigen; | -0.43 | 0.03 | 48.00 | 2.97 |
| SLNPSGEVTR | QIGDALPVSCTISASR | CD166_HUMAN | | | CD166 antigen; | 2.24 | 0.24 | 40.70 | 5.69 |
| GKWKEYECPDG | SPVFIAFR | CD166_HUMAN | | | CD166 antigen; | 1.08 | 0.07 | 25.90 | -0.41 |
| SATVFRPGLG | WYTVNSAYGDTIIIPCR | CD166_HUMAN | | | CD166 antigen; | 0.98 | 0.05 | 80.20 | 4.17 |
| DSEQLPLRPK | SVDFDSLTVR | CD2AP_HUMAN | | | CD2-associated protein; | 0.04 | 0.00 | 37.00 | 4.80 |
| EASKSQEMVH | LVNKESSETPDQFMTAETR | CD44_HUMAN | | | CD44 antigen; | 1.29 | 0.11 | 44.40 | -3.65 |
| GLCLVPLSLA | QIDLNITCR | CD44_HUMAN | | | CD44 antigen; | 0.04 | 0.00 | 33.90 | 0.60 |
| | M VGGEEAAA VEELVSGVR | C2AIL_HUMAN | | | CDKN2AIP N-terminal-like protein; | 0.26 | 0.03 | 32.80 | 3.21 |
| AVEELVSGVR | QAADFAEQFR | C2AIL_HUMAN | | | CDKN2AIP N-terminal-like protein; | -0.29 | 0.03 | 27.00 | 0.00 |
| MHSLA | TAAPVPTTLAQVDR | RCD1_HUMAN | | | Cell differentiation | -0.24 | 0.02 | 44.00 | 4.20 |
| TSDRGFQFVS | SSLPDICYR | CNBP_HUMAN | | | Cellular nucleic acid-binding protein; | 0.11 | 0.01 | 40.40 | 3.58 |
| SDRGFQFVSS | SSLPDICYR | CNBP_HUMAN | | | Cellular nucleic acid-binding protein; | -0.52 | 0.03 | 22.90 | 4.06 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|-----------------------|-------------|------|------|--|---------------------------------|-----------------------|----------------------|------|
| LIPHINKQTS | STPSSLALTSASR | CE170_HUMAN | | | Centrosomal protein of 170 kDa; | 2.62 | 0.23 | 42.40 | 2.98 |
| IPEAFRGVHR | YLSNAYAR | CLIC1_HUMAN | | | Chloride intracellular channel protein 1; | 4.07 | 0.37 | 24.30 | 3.85 |
| EQPQVELFVK | AGSDGAKIGNCPFSQR | CLIC1_HUMAN | | | Chloride intracellular channel protein 1; | 1.53 | 0.11 | 23.30 | 0.23 |
| IVQVVCKKYR | GFTIPEAFR | CLIC1_HUMAN | | | Chloride intracellular | 1.31 | 0.03 | 29.90 | 0.84 |
| LLLGSRPARG | AGPEPPVLPPIR | CHRD_HUMAN | | | Chordin; | 0.33 | 0.02 | 37.30 | 2.71 |
| MGKKQNGKSK | KVEEAEPPEFVVEKVLDRR | CBX3_HUMAN | | | Chromobox protein | 0.20 | 0.00 | 34.00 | 2.20 |
| MGKKTTR | TADSSSEDEEEYVVEKVLDRR | CBX5_HUMAN | | | Chromobox protein homolog 5; | -2.46 | 0.14 | 51.10 | 2.64 |
| VVESMVTATE | VAPPPPPVEVPIR | CHD4_HUMAN | | | Chromodomain-helicase-DNA-binding protein 4; | -0.72 | 0.06 | 30.90 | 4.63 |
| PDLALRMAVR | NNLAGAEELFAR | CLH1_HUMAN | | | Clathrin heavy chain 1; | 2.22 | 0.14 | 59.50 | 2.25 |
| KDEEETVTTK | HIHITQATETTTTR | EPN4_HUMAN | | | Clathrin interactor 1; | 1.40 | 0.13 | 32.40 | 2.50 |
| RKQEAWEK | AIKELEEWYAR | CLCA_HUMAN | | | Clathrin light chain A; | -0.09 | 0.00 | 44.10 | 0.14 |
| RLLRERAIFK | VHSDFATAATR | K0664_HUMAN | | | Clustered mitochondria | 0.66 | 0.06 | 31.50 | 3.22 |
| LDVMQDHFSR | ASSIIDELFQDR | CLUS_HUMAN | | | Clusterin; | 4.90 | 0.67 | 59.80 | 2.18 |
| DVMQDHFSRA | SSIIDELFQDR | CLUS_HUMAN | | | Clusterin; | 0.80 | 0.12 | 48.00 | 1.40 |
| VTEVVVKLFD | SDPITVTPVEVSR | CLUS_HUMAN | | | Clusterin; | 0.79 | 0.07 | 48.70 | 4.58 |
| AQQAMDIHFH | SPAQHPPTFEFIR | CLUS_HUMAN | | | Clusterin; | 0.38 | 0.04 | 30.00 | 0.77 |
| IDSLENDRQ | QTHMLDVMQDHFSR | CLUS_HUMAN | | | Clusterin; | -3.05 | 0.25 | 24.70 | 2.13 |
| | MVLLAAAVCTKAGKAIIVSR | COPD_HUMAN | | | Coatomer subunit delta; | 0.18 | 0.01 | 34.20 | 3.03 |
| LLLLPGPAGS | EGAAPAIATCFTR | COCH_HUMAN | | | Cochlin; | 7.84 | 0.81 | 66.60 | 1.81 |
| LHARHKEQQR | QFGLTPPGSLR | CC153_HUMAN | | | Coiled-coil domain-containing protein 153; | 2.08 | 0.08 | 27.40 | 3.73 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|------------------------------|-------------|-------------|------|---|---------------------------------|-----------------------|----------------------|-------|
| MRAAPRPAPV | AQPPAAAPPSAVGSSAAAPR | CHCH2_HUMAN | CHCH9_HUMAN | | Coiled-coil-helix-coiled- | -0.26 | 0.02 | 46.90 | 1.27 |
| PPASRAPQMR | AAPRPAPVAQPPAAAPPSAVGSSAAAPR | CHCH2_HUMAN | CHCH9_HUMAN | | Coiled-coil-helix-coiled- | -0.40 | 0.03 | 48.60 | 1.60 |
| AITPDHLEPR | LSIIATDHTYR | CO6A1_HUMAN | | | coil-helix domain-Collagen alpha-1(VI) | 5.73 | 0.51 | 38.70 | 3.03 |
| GRQVNEPHIR | VLVTGKTAEYDVAYGESHLFR | CO6A1_HUMAN | | | Collagen alpha-1(VI) chain; | 5.36 | 0.31 | 40.60 | 3.89 |
| GRTDPAHDVR | VAVVQYSGTGQQRPER | CO6A1_HUMAN | | | Collagen alpha-1(VI) chain; | 4.24 | 0.54 | 31.00 | 0.66 |
| RVPSYQALLR | GVFHQTVSR | CO6A1_HUMAN | | | Collagen alpha-1(VI) chain; | 3.25 | 0.28 | 31.10 | 4.44 |
| QLLPPSPNNR | IALVITDGR | CO6A1_HUMAN | | | Collagen alpha-1(VI) | 1.89 | 0.33 | 35.80 | 0.41 |
| LVWNAGALHY | SDEVEIIQGLTR | CO6A1_HUMAN | | | Collagen alpha-1(VI) | 1.56 | 0.10 | 55.40 | 5.04 |
| ESGTRRGIPK | VIVVITDGR | COEA1_HUMAN | | | Collagen alpha-1(XIV) chain; | 7.54 | 1.08 | 30.10 | 2.40 |
| LTESYCETWR | TEAPSATGQASSLLGGR | COIA1_HUMAN | | | Collagen alpha-1(XVIII) chain; | 5.43 | 0.79 | 82.80 | 4.23 |
| FAYGDHQSPN | TAITQMTFLR | CO5A2_HUMAN | | | Collagen alpha-2(V) chain; | -1.40 | 0.07 | 37.40 | 3.30 |
| IGPKGDPGNR | GHPGPPGVLVTPPLPLK | CO4A4_HUMAN | | | Collagen alpha-4(IV) chain; | -2.24 | 0.11 | 22.50 | 4.41 |
| VRLHWPTSLP | SGDAFSSVGTHR | C43BP_HUMAN | | | Collagen type IV alpha-3-binding protein; | 0.45 | 0.04 | 26.70 | 0.72 |
| SEKVRLHWPT | SLPSGDAFSSVGTHR | C43BP_HUMAN | | | Collagen type IV alpha-3-binding protein; | -1.59 | 0.05 | 36.80 | -0.13 |
| QVPDTESETR | ILLQGTPVAQMTEDAVER | CO3_HUMAN | | | Complement C3; | 8.04 | 1.98 | 112.10 | 2.29 |
| YTPGSTVLYR | IFTVNHKLLPVGR | CO3_HUMAN | | | Complement C3; | 5.03 | 0.41 | 36.30 | 1.35 |
| RISLPESLKR | IPIEDGSGEVVLSR | CO3_HUMAN | | | Complement C3; | 4.83 | 0.32 | 55.90 | 5.00 |
| PSRSSKITHR | IHWESASLLR | CO3_HUMAN | | | Complement C3; | 4.02 | 0.29 | 29.90 | -1.05 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|------------------------|-------------|------|------|---|---------------------------------|-----------------------|----------------------|-------|
| VVKSGQSEDR | QPVPGQQMTLKIEGDHGAR | CO3_HUMAN | | | Complement C3; | 3.93 | 0.20 | 35.20 | 0.94 |
| FDEYIMAIEQ | TIKSGSDEVQVGQQR | CO3_HUMAN | | | Complement C3; | 3.88 | 0.45 | 45.90 | 2.07 |
| ARASHLGLAR | SNLDEDIIAEENIVSR | CO3_HUMAN | | | Complement C3; | 3.23 | 0.30 | 62.30 | 5.90 |
| SDDKVTLEER | LDKACEPGVDYVYKTR | CO3_HUMAN | | | Complement C3; | 2.74 | 0.18 | 51.20 | -2.70 |
| KGYTQQLAFR | QPSSAFAAFVKR | CO3_HUMAN | | | Complement C3; | 2.61 | 0.19 | 20.00 | 0.73 |
| GDGVAKLSIN | THPSQKPLSITVR | CO3_HUMAN | | | Complement C3; | 1.73 | 0.13 | 29.80 | 2.89 |
| LLTHLPLALG | SPMYSIITPNILR | CO3_HUMAN | | | Complement C3; | 1.49 | 0.10 | 56.30 | 1.82 |
| QALPYSTVGN | SNNYLHLSVLR | CO3_HUMAN | | | Complement C3; | 1.38 | 0.09 | 39.80 | 0.59 |
| PCACGCGCGS | LHTDGDKAFVDFLSDEIKEER | C1QBP_HUMAN | | | Complement component 1 Q subcomponent-binding | 0.26 | 0.01 | 47.20 | 3.58 |
| VLLCLPAVWG | DCGLPPDVPNAQPALEGR | DAF_HUMAN | | | Complement decay- | 0.99 | 0.02 | 81.40 | 4.44 |
| IVNHAGRRPD | SLQHVLLPVLDR | CFAD_HUMAN | | | Complement factor D; | 0.74 | 0.04 | 41.20 | -0.14 |
| EVLKRLRLQK | RGTGGVDTAAVGGVFDVSNADR | KCRB_HUMAN | | | Creatine kinase B-type; | 5.36 | 0.56 | 75.20 | 4.65 |
| GDEESYEVFK | DLFDPIIEDR | KCRB_HUMAN | | | Creatine kinase B-type; | 5.03 | 0.45 | 41.10 | 9.19 |
| LSAHNNHMAK | VLTPELYAELR | KCRB_HUMAN | | | Creatine kinase B-type; | 2.75 | 0.23 | 33.60 | 4.50 |
| LQKRGTGGVD | TAAVGGVFDVSNADR | KCRB_HUMAN | | | Creatine kinase B-type; | 1.45 | 0.19 | 49.50 | -0.73 |
| IQKRVPcAYD | KTALALEVGDIVKVTR | CRKL_HUMAN | | | Crk-like protein; | 4.60 | 0.27 | 26.10 | 1.72 |
| AARLPRGAEA | FEIALPR | CDCP1_HUMAN | | | CUB domain-containing protein 1; | 5.79 | 0.49 | 23.30 | -0.57 |
| PHSAADDDTS | SELQRLADVDPQQGR | CNGA2_HUMAN | | | Cyclic nucleotide-gated | 2.77 | 0.29 | 47.50 | 9.76 |
| IRHRPKAHYM | KKQPDITEGMR | CCNA1_HUMAN | | | Cyclin-A1; | 7.47 | 1.03 | 32.90 | 1.23 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|--------------------------|-------------|------|------|--|---------------------------------|-----------------------|----------------------|-------|
| MMC | GAPSATQPATAETQHIADQVR | CYTB_HUMAN | | | Cystatin-B; | -0.52 | 0.05 | 42.50 | 1.83 |
| MMCG | APSATQPATAETQHIADQVR | CYTB_HUMAN | | | Cystatin-B; | -0.69 | 0.07 | 32.30 | 3.48 |
| MM | CGAPSATQPATAETQHIADQVR | CYTB_HUMAN | | | Cystatin-B; | -0.72 | 0.07 | 86.60 | 2.60 |
| AGSSPGKPPR | LVGGPMDASVEEEGVRR | CYTC_HUMAN | | | Cystatin-C; | 4.97 | 0.60 | 84.30 | -1.08 |
| AGSSPGKPPR | LVGGPMDASVEEEGVRR | CYTC_HUMAN | | | Cystatin-C; | 2.30 | 0.14 | 27.90 | 0.60 |
| ASVEEEGVRR | ALDFAVGEYNKASNDMYHSR | CYTC_HUMAN | | | Cystatin-C; | 1.56 | 0.07 | 43.30 | 2.73 |
| LLLARGTRA | LVCLPCDESKCEEPR | CRIM1_HUMAN | | | Cysteine-rich motor neuron 1 protein; | 0.67 | 0.03 | 38.30 | 1.68 |
| GSYIYEKPLA | EGPQVTGPIEVPAAR | CRIP2_HUMAN | | | Cysteine-rich protein 2; | 0.72 | 0.07 | 69.20 | 5.59 |
| MATAEASGSD | GKGQEVETSVTYYR | CYB5B_HUMAN | | | Cytochrome b5 type B; | -0.24 | 0.02 | 45.70 | 1.96 |
| HTVEKGGKHK | TGPNLHGLFGR | CYC_HUMAN | | | Cytochrome c; | -0.37 | 0.01 | 30.00 | 1.66 |
| MKLSPYYKVF | EEDALSWEDKLNK | DYHC1_HUMAN | | | Cytoplasmic dynein 1 heavy chain 1; | 6.49 | 1.24 | 32.30 | 2.76 |
| VPQIEVETHK | VAAPDVVVPTLDTVR | DYHC1_HUMAN | | | Cytoplasmic dynein 1 heavy chain 1; | 0.71 | 0.05 | 50.20 | 0.57 |
| HYDFGLRALK | SVLVSAGNVKR | DYHC1_HUMAN | | | Cytoplasmic dynein 1 | 0.60 | 0.06 | 36.00 | 2.69 |
| TEEEKQILH | SEEFLSFFDHSTR | DC112_HUMAN | | | Cytoplasmic dynein 1 | 0.02 | 0.00 | 32.30 | 0.61 |
| HYLAGRRAMK | TVFGVEPDLTR | CNDP2_HUMAN | | | Cytosolic non-specific dipeptidase; | 4.32 | 0.17 | 40.20 | 4.41 |
| KGVRVNCAR | GGIVDEGALLR | SERA_HUMAN | | | D-3-phosphoglycerate dehydrogenase; | 2.16 | 0.09 | 47.80 | 1.06 |
| WKLDVATDNF | FQNPelyir | DCNL1_HUMAN | | | DCN1-like protein 1; | 0.53 | 0.02 | 33.20 | 1.40 |
| PSVIRHVRSW | SNIPFITVPLSR | P5CS_HUMAN | | | Delta-1-pyrroline-5-Delta(3,5)-Delta(2,4)-dienoyl-CoA isomerase, | -0.09 | 0.00 | 51.30 | 4.37 |
| YPGLSISLRL | TGSSAQEEASGVALGEAPDHSYES | ECH1_HUMAN | | | | -1.04 | 0.09 | 82.70 | 3.84 |
| EREAPAGALA | AVLKHSSSTLPPESTQVR | DHYS_HUMAN | | | Deoxyhypusine synthase; | -0.21 | 0.01 | 33.40 | 3.02 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|--------------------------|-------------|------------|------|------------------------------|---------------------------------|-----------------------|----------------------|-------|
| ALRGSGEAAQ | RGLQYKYLDESSGGWR | DNS2A_HUMAN | | | Deoxyribonuclease-2-alpha; | -0.65 | 0.07 | 40.20 | 2.42 |
| EKFQVKKGDR | IAQLICER | DUT_HUMAN | | | Deoxyuridine 5'- | 3.50 | 0.26 | 30.70 | 0.10 |
| ETPAISPSKR | ARPAEVGGMQLR | DUT_HUMAN | | | Deoxyuridine 5'-triphosphate | -0.04 | 0.00 | 57.60 | -0.15 |
| PKHPLVLRQK | RAWITAPVALR | DSG2_HUMAN | | | Desmoglein-2; | 3.86 | 0.40 | 33.90 | 1.40 |
| KHPLVLRQKR | AWITAPVALR | DSG2_HUMAN | | | Desmoglein-2; | 0.57 | 0.02 | 33.90 | 2.38 |
| CRKRRKRCMR | HAMCCPGNYCKNGICVSSDQNHFR | DKK1_HUMAN | | | Dickkopf-related protein 1; | 4.77 | 0.92 | 32.30 | -8.18 |
| TDEYCASPTR | GGDAGVQICLACR | DKK1_HUMAN | | | Dickkopf-related protein 1; | 2.15 | 0.18 | 67.90 | 3.90 |
| EVCTKQRKKG | SHGLEIFQR | DKK1_HUMAN | DKK2_HUMAN | | Dickkopf-related protein 1; | 2.09 | 0.12 | 35.60 | 1.97 |
| MCCPGNYCKN | GICVSSDQNHFR | DKK1_HUMAN | | | Dickkopf-related protein 1; | 2.00 | 0.17 | 31.20 | 1.72 |
| RGEIEETITE | SFGNDHSTLDGYSR | DKK1_HUMAN | | | Dickkopf-related protein 1; | 1.94 | 0.14 | 25.70 | 0.82 |
| LDGYSRRTTL | SSKMYHTKGQEGSVCLR | DKK1_HUMAN | | | Dickkopf-related protein 1; | 1.76 | 0.06 | 36.50 | 1.80 |
| NHFRGEIEET | ITESFGNDHSTLDGYSR | DKK1_HUMAN | | | Dickkopf-related protein 1; | 1.33 | 0.12 | 34.90 | 0.93 |
| CVSSDQNHFR | GEIEETITESFGNDHSTLDGYSR | DKK1_HUMAN | | | Dickkopf-related protein 1; | 1.22 | 0.08 | 48.30 | 2.32 |
| YSRRTTLSSK | MYHTKGQEGSVCLR | DKK1_HUMAN | | | Dickkopf-related protein 1; | 0.75 | 0.05 | 29.50 | 1.55 |
| GEVCTKQRKK | GSHGLEIFQR | DKK1_HUMAN | DKK2_HUMAN | | Dickkopf-related protein 1; | 0.53 | 0.03 | 38.40 | 5.85 |
| QNHFRGEIEE | TITESFGNDHSTLDGYSR | DKK1_HUMAN | | | Dickkopf-related protein 1; | 0.42 | 0.03 | 32.30 | 2.41 |
| RFRTTAVCK | DDLVTVKTPAFAESVTEGDVR | ODO2_HUMAN | | | Dihydrolipoyllysine-residue | 0.78 | 0.02 | 78.50 | 3.81 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|-------------|-------------------------|-------------|------|------|---|---------------------------------|-----------------------|----------------------|------|
| MAP | VLSKDSADIESILALNPR | DPYD_HUMAN | | | Dihydropyrimidine dehydrogenase | 0.60 | 0.03 | 50.10 | 2.93 |
| M | APVLSKDSADIESILALNPR | DPYD_HUMAN | | | [NADP(+); | 0.26 | 0.01 | 56.90 | 4.86 |
| KVTTYCNETM | TGWVHDLVGR | CATC_HUMAN | | | Dipeptidyl peptidase 1; | 2.14 | 0.16 | 37.20 | 1.20 |
| APLTAEIQQK | ILHLPTSWDWR | CATC_HUMAN | | | Dipeptidyl peptidase 1; | 0.37 | 0.00 | 41.00 | 2.74 |
| GSEHCYDIYR | LYHSCADPTGCGTGP DAR | DPP2_HUMAN | | | Dipeptidyl peptidase 2; | 1.82 | 0.17 | 41.50 | 2.29 |
| QDAPAIAFGG | SYGGMLSAYLR | DPP2_HUMAN | | | Dipeptidyl peptidase 2; | 1.34 | 0.05 | 37.60 | 6.34 |
| LWALGLLGAG | SPLPSWLPNIGGTEEQAESEKAF | ADA15_HUMAN | | | Disintegrin and | 1.76 | 0.03 | 56.50 | 6.33 |
| QDDLPI SLKK | VLQTS LPEPLR | ADA15_HUMAN | | | Disintegrin and | 1.46 | 0.13 | 38.10 | 4.29 |
| VLGTCP PARC | GQAGDASLMELEKR | ADA22_HUMAN | | | Disintegrin and | -1.24 | 0.23 | 40.40 | 1.46 |
| PRPYSKQVSY | VIQAEGKEHIIHLER | ADAM9_HUMAN | | | Disintegrin and metalloproteinase domain- | 1.32 | 0.08 | 34.90 | 0.11 |
| LESFNYVLSK | STKADIGPNLDQLKDDEILR | ERC6L_HUMAN | | | DNA excision repair protein ERCC-6-like; | 1.10 | 0.08 | 43.10 | 4.12 |
| AHNLCYT TLL | RPGTAQKLG LTEDQFIR | DPOD1_HUMAN | | | DNA polymerase delta catalytic subunit; | 0.15 | 0.01 | 31.10 | 4.83 |
| MEQQSISISK | AGIVTSLQAR | MCM2_HUMAN | | | DNA replication licensing factor MCM2; | 0.66 | 0.08 | 36.60 | 2.19 |
| EEDQGIYQSK | VRELISDNQYR | MCM3_HUMAN | | | DNA replication licensing | 1.09 | 0.10 | 42.40 | 1.61 |
| LLGDKGQTAR | TQRPADVIFATVR | MCM7_HUMAN | | | DNA replication licensing | 1.03 | 0.03 | 34.40 | 4.44 |
| TSRSKEEFTK | LAASFQLR | RFX8_HUMAN | | | DNA-binding protein | 2.09 | 0.15 | 21.40 | 0.86 |
| ARWPVAGQIR | ATQQQHDFTLTQTADGR | PRKDC_HUMAN | | | DNA-dependent protein | 2.32 | 0.25 | 45.10 | 2.31 |
| AASQAVEEMR | SRVVLGEFGVR | RPAC1_HUMAN | | | DNA-directed RNA | 0.11 | 0.01 | 45.60 | 1.20 |
| M | GKDYYQTLGLAR | DNJB1_HUMAN | | | DnaJ homolog subfamily B member 1; | -0.14 | 0.01 | 46.50 | 1.10 |
| M | VDYEEVLGVQR | DNJB6_HUMAN | | | DnaJ homolog subfamily B member 6; | -0.92 | 0.04 | 50.50 | 2.98 |
| IVYMAILVGT | DQDFYSLLGVSKTASSR | DJC10_HUMAN | | | DnaJ homolog subfamily C member 10; | 0.70 | 0.03 | 34.70 | 4.24 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|-------------|-----------------------|-------------|-------------|-------------|--|---------------------------------|-----------------------|----------------------|-------|
| QQRQLGQR | QPPPSEPTQGPEIVPR | DNJC4_HUMAN | | | DnaJ homolog subfamily | -4.47 | 0.00 | 32.40 | -1.30 |
| DRQSARKPLL | GLPSYMLQSEELR | DNMBP_HUMAN | | | Dynamin-binding protein; | -2.46 | 0.14 | 63.70 | 2.45 |
| LLLSVVMAQS | HWPSEPSEAVR | DAG1_HUMAN | | | Dystroglycan; | 1.31 | 0.03 | 38.30 | 2.56 |
| SLPDIPPIQL | EDAGSSSLDNLLSR | TRI33_HUMAN | | | E3 ubiquitin-protein | 1.66 | 0.13 | 32.10 | 0.60 |
| DCELSAKLLR | RADLNQIGIGEPQSPSR | EFHD2_HUMAN | | | EF-hand domain-containing protein D2; | 1.01 | 0.08 | 71.20 | 2.90 |
| LIAGTLVLEA | AVTGVVPVKQDTVKGR | ELAF_HUMAN | | | Elafin; | 3.45 | 0.34 | 34.20 | 2.30 |
| IKVSYARPSS | EVIKDANLYISGLPR | ELAV1_HUMAN | | | ELAV-like protein 1; | 0.06 | 0.00 | 42.40 | 2.41 |
| TIKVSYPARPS | SEVIKIDANLYISGLPR | ELAV1_HUMAN | | | ELAV-like protein 1; | -0.92 | 0.07 | 31.60 | 3.69 |
| LQSKTIKVSY | ARPSSEVIKIDANLYISGLPR | ELAV1_HUMAN | | | ELAV-like protein 1; | -1.09 | 0.05 | 45.70 | 2.45 |
| SEWLDQKLTK | SDRPELTGAKVVVSGGR | ETFA_HUMAN | | | Electron transfer flavoprotein subunit alpha, mitochondrial; | 0.24 | 0.02 | 35.30 | 2.22 |
| LGRFAVRDMR | QTVAVGVKAVDK | EF1A1_HUMAN | EF1A3_HUMAN | | Elongation factor 1-alpha 1; | 1.59 | 0.14 | 23.50 | 1.63 |
| RPTDKPLRLP | LQDVYKIGGIGTVPVGR | EF1A1_HUMAN | EF1A2_HUMAN | EF1A3_HUMAN | Elongation factor 1-alpha 1; | 1.09 | 0.04 | 28.40 | 1.47 |
| LGRFAVRDMR | QTVAVGVKAVDKK | EF1A1_HUMAN | EF1A3_HUMAN | | Elongation factor 1-alpha 1; | 0.99 | 0.07 | 31.30 | 1.15 |
| MVPGKPMCVE | SFSDYPLGR | EF1A1_HUMAN | EF1A3_HUMAN | | Elongation factor 1-alpha 1; | 0.76 | 0.02 | 24.40 | 3.66 |
| TDKPLRLPLQ | DVYKIGGIGTVPVGR | EF1A1_HUMAN | EF1A2_HUMAN | EF1A3_HUMAN | Elongation factor 1-alpha 1; | 0.37 | 0.03 | 38.90 | 3.02 |
| LRLPLQDVYK | IGGIGTVPVGR | EF1A1_HUMAN | EF1A2_HUMAN | EF1A3_HUMAN | Elongation factor 1-alpha 1; | 0.30 | 0.00 | 40.70 | 1.13 |
| STPEPPYSQKR | YEEIVKEVSTYIKK | EF1A1_HUMAN | EF1A3_HUMAN | | Elongation factor 1-alpha 1; | 0.02 | 0.00 | 29.00 | 3.36 |
| RLPLQDVYKI | GGIGTVPVGR | EF1A1_HUMAN | EF1A2_HUMAN | EF1A3_HUMAN | Elongation factor 1-alpha 1; | -0.09 | 0.01 | 43.70 | 1.17 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|---------------------------|-------------|-------------|-------------|------------------------------|---------------------------------|-----------------------|----------------------|------|
| KLEDGPKFLK | SGDAAIVDMVPGKPMCVESFSDYI | EF1A1_HUMAN | EF1A3_HUMAN | | Elongation factor 1-alpha 1; | -0.21 | 0.00 | 85.50 | 3.96 |
| DKPLRLPLQD | VYKIGGIGTVPVGR | EF1A1_HUMAN | EF1A2_HUMAN | EF1A3_HUMAN | Elongation factor 1-alpha | -0.62 | 0.04 | 40.40 | 1.56 |
| ISLWKFETSK | YYVTIIDAPGHR | EF1A1_HUMAN | EF1A3_HUMAN | | Elongation factor 1-alpha 1; | -1.09 | 0.07 | 39.00 | 3.40 |
| SGDHGELVVR | IASLEVENQSLR | EF1D_HUMAN | | | Elongation factor 1-delta; | 1.36 | 0.08 | 50.50 | 2.02 |
| VLEKSSPGHR | ATAPQTQHVSPMR | EF1D_HUMAN | | | Elongation factor 1-delta; | 0.31 | 0.02 | 42.10 | 1.85 |
| IARARENIQK | SLAGSSGPGASSGTSGDHGELVVR | EF1D_HUMAN | | | Elongation factor 1-delta; | -0.14 | 0.01 | 78.70 | 3.42 |
| LRDIARAREN | IQKSLAGSSGPGASSGTSGDHGELV | EF1D_HUMAN | | | Elongation factor 1-delta; | -0.34 | 0.03 | 54.70 | 6.73 |
| RARENIQKSL | AGSSGPGASSGTSGDHGELVVR | EF1D_HUMAN | | | Elongation factor 1-delta; | -0.37 | 0.04 | 37.80 | 0.84 |
| DIARARENIQ | KSLAGSSGPGASSGTSGDHGELVV | EF1D_HUMAN | | | Elongation factor 1-delta; | -0.49 | 0.03 | 63.40 | 2.68 |
| AKDPFAHLPK | STFVLDEFKR | EF1G_HUMAN | | | Elongation factor 1- | 1.15 | 0.07 | 33.10 | 0.61 |
| TYPENWRAFK | ALIAAQYSGAQVR | EF1G_HUMAN | | | Elongation factor 1-gamma; | 0.78 | 0.06 | 77.50 | 2.69 |
| SVIAHVDHGK | STLTDSLVCAGIIASAR | EF2_HUMAN | | | Elongation factor 2; | 0.63 | 0.02 | 32.60 | 2.50 |
| | MVNFTVDQIR | EF2_HUMAN | | | Elongation factor 2; | 0.13 | 0.01 | 32.30 | 1.15 |
| GQIIPARRC | LYASVLTAQPR | EF2_HUMAN | | | Elongation factor 2; | -2.24 | 0.32 | 40.50 | 3.19 |
| | MVAPVLETSHVFCCPNR | ELP2_HUMAN | | | Elongator complex protein 2; | 0.35 | 0.02 | 31.10 | 0.89 |
| SCSLSPSLA | ETVHCDLQPVGPER | EGLN_HUMAN | | | Endoglin; | 1.31 | 0.11 | 36.90 | 1.14 |
| MMKREYRGQR | SVKALADYIR | ERP44_HUMAN | | | Endoplasmic reticulum | -0.69 | 0.04 | 35.20 | 1.93 |
| FYSNKEIFLR | ELISNASDALDKIR | ENPL_HUMAN | H90B2_HUMAN | H90B3_HUMAN | Endoplasmic; | 1.68 | 0.12 | 38.30 | 2.00 |
| VVLFETATLR | SGYLLPDTKAYGDR | ENPL_HUMAN | | | Endoplasmic; | 0.87 | 0.07 | 22.70 | 2.58 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|--------------------------|-------------|-------------|------|---|---------------------------------|-----------------------|----------------------|-------|
| LLVPAHLVAA | WSNNYAVDCPQHCDSSSECKSSPR | ESM1_HUMAN | | | Endothelial cell-specific | 3.96 | 0.38 | 43.30 | 7.32 |
| GLVRLVHQER | TLAFPLTIR | EPCR_HUMAN | | | Endothelial protein C receptor; | 2.17 | 0.13 | 27.70 | 1.59 |
| LAAGLVACLA | ALGIQYQTR | ECE1_HUMAN | | | Endothelin-converting enzyme 1; | 1.68 | 0.12 | 35.70 | 3.34 |
| LRRLQEREL | VEPLTPSGEAPNQALLR | EGFR_HUMAN | | | Epidermal growth factor receptor; | 3.22 | 0.26 | 50.40 | 6.09 |
| FFPKEAKPNG | IFKGSTAENAEYLR | EGFR_HUMAN | | | Epidermal growth factor receptor; | 1.24 | 0.11 | 41.80 | 4.47 |
| SPSTSRTPLL | SSLSATSNNSTVACIDR | EGFR_HUMAN | | | Epidermal growth factor receptor; | 1.03 | 0.12 | 81.30 | 3.92 |
| VACIDRNLQ | SCPIKEDSFLQR | EGFR_HUMAN | | | Epidermal growth factor receptor; | 0.89 | 0.10 | 29.90 | 1.61 |
| RYACCPGWKR | TSGLPGACGAAICQPPCR | EGFL7_HUMAN | | | Epidermal growth factor-like protein 7; | 1.89 | 0.16 | 61.30 | 0.74 |
| PRYACCPGWK | RTSGLPGACGAAICQPPCR | EGFL7_HUMAN | | | Epidermal growth factor-like protein 7; | 1.64 | 0.16 | 70.10 | 4.86 |
| ILQQIELDLK | ATQALVLAPTR | IF4A1_HUMAN | | | Eukaryotic initiation factor 4A-I; | 0.68 | 0.06 | 41.60 | -0.09 |
| RRYLSPKWIK | MFVLDEADEMLSR | IF4A1_HUMAN | IF4A2_HUMAN | | Eukaryotic initiation factor 4A-I; | 0.38 | 0.05 | 67.80 | 5.22 |
| PGYGAYDAFK | HAVSDPSILDSLNLNEDER | IF2A_HUMAN | | | Eukaryotic translation initiation factor 2 subunit | 0.68 | 0.04 | 52.30 | 2.83 |
| SEKPLRSIKR | IFHTVTTTDDPVIR | EIF3D_HUMAN | | | Eukaryotic translation initiation factor 3 subunit | 1.50 | 0.09 | 33.00 | 0.55 |
| SVAYRYRRWK | LGDDIDLIVR | EIF3D_HUMAN | | | Eukaryotic translation initiation factor 3 subunit D; | 0.60 | 0.04 | 27.40 | 4.92 |
| | M KPILLQGHER | EIF3I_HUMAN | | | Eukaryotic translation initiation factor 3 subunit | 0.38 | 0.01 | 51.50 | 2.25 |
| SGELNQYSAK | SGEVLVNVKEHSR | EIF3I_HUMAN | | | Eukaryotic translation initiation factor 3 subunit | 0.00 | 0.00 | 33.00 | 2.43 |
| LAKETFGVNN | AVYGIDAMNPSSR | EIF3J_HUMAN | | | Eukaryotic translation initiation factor 3 subunit | 0.04 | 0.00 | 56.50 | 1.06 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|------------------------|-------------|-------------|------|--|---------------------------------|-----------------------|----------------------|-------|
| RPIDTSRLTK | ITKPGSIDSNNQLFAPGGR | IF4G1_HUMAN | | | Eukaryotic translation initiation factor 4 gamma | 0.89 | 0.08 | 38.50 | 0.64 |
| QEEQRREMLE | TVKQLTGGVDVER | IF4G3_HUMAN | | | Eukaryotic translation | 0.31 | 0.02 | 44.40 | 2.06 |
| IVPAAATTVS | SPSAAITVQR | IF4G3_HUMAN | | | Eukaryotic translation initiation factor 4 gamma | -0.37 | 0.03 | 29.30 | 2.08 |
| SSASTSQSTR | AASIFGGAKPVDTAAR | IF4B_HUMAN | | | Eukaryotic translation initiation factor 4B; | 0.80 | 0.08 | 36.50 | -0.31 |
| RMDEISDHAK | VLTLSDDLER | IF5_HUMAN | | | Eukaryotic translation initiation factor 5; | 1.39 | 0.04 | 39.40 | 3.95 |
| IKRNDFQLIG | IQDGYLSLLQDSGEVR | IF5A1_HUMAN | | | Eukaryotic translation | 0.20 | 0.02 | 85.50 | 1.10 |
| DFQLIGIQDG | YLSLLQDSGEVR | IF5A1_HUMAN | | | Eukaryotic translation | -0.07 | 0.01 | 55.50 | 4.95 |
| MADDDL | FETGDAGASATFPMQCSALR | IF5A1_HUMAN | IF5AL_HUMAN | | Eukaryotic translation initiation factor 5A-1; | -1.00 | 0.04 | 98.20 | 3.25 |
| ADDLDFETGD | AGASATFPMQCSALR | IF5A1_HUMAN | IF5AL_HUMAN | | Eukaryotic translation initiation factor 5A-1; | -1.19 | 0.05 | 61.90 | 3.49 |
| MAAGFK | TVEPLEYYR | EXOS8_HUMAN | | | Exosome complex component RRP43; | 0.46 | 0.02 | 33.60 | 2.32 |
| M | KETPLSNCR | EXOS9_HUMAN | | | Exosome complex component RRP45; | 0.17 | 0.01 | 33.70 | 2.37 |
| QQAREMPLLK | SEVAAGVKKSGPLPSAER | EXOSX_HUMAN | | | Exosome component 10; | 0.78 | 0.07 | 34.80 | 0.26 |
| VLLLVAGALT | ALLPSVKEDKMLMLR | EXTL2_HUMAN | | | Exostosin-like 2; | 1.00 | 0.06 | 30.30 | 0.55 |
| VLTYLAVASA | ASEGGFTATGQR | ECM1_HUMAN | | | Extracellular matrix protein 1; | 1.54 | 0.04 | 46.60 | 2.23 |
| MVFLVACALH | IALDLLPR | DMP4_HUMAN | | | Extracellular serine/threonine protein | -1.40 | 0.07 | 28.90 | 2.87 |
| ASYVRSRSIR | SVAIEVDGR | SULF2_HUMAN | | | Extracellular sulfatase Sulf-2; | 0.48 | 0.03 | 44.90 | 3.69 |
| YEPVSYHVQE | SLQDEGAEPTGYSAELSSEGIR | EZRI_HUMAN | | | Ezrin; | -0.46 | 0.04 | 56.70 | -1.33 |
| EFNEVFNDVR | LLLNNNDLLR | CAZA1_HUMAN | CAZA2_HUMAN | | F-actin-capping protein subunit alpha-1; | 5.88 | 0.60 | 39.50 | 8.80 |
| MLWLQTNKSG | SGTMNLGGSLTR | CAPZB_HUMAN | | | F-actin-capping protein | 0.04 | 0.01 | 54.50 | 0.49 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|---------------------|-------------|-------------|------|---|---------------------------------|-----------------------|----------------------|-------|
| KVGGDACLR | GSDPGGPGLLPPR | FXL19_HUMAN | | | F-box/LRR-repeat protein 19; | 0.15 | 0.01 | 26.90 | 4.14 |
| PVEAFAQNVL | SKADVIQATGDAICIFR | SSRP1_HUMAN | | | FACT complex subunit SSRP1; | 0.97 | 0.04 | 60.30 | 1.76 |
| KQLQERAGVK | MILIQDGSQNTNVDKPLR | FUBP2_HUMAN | | | Far upstream element-binding protein 2; | 0.24 | 0.03 | 33.80 | 1.89 |
| GGGIDVPVPR | HSVGVVIGR | FUBP2_HUMAN | | | Far upstream element-binding protein 2; | 0.09 | 0.01 | 26.00 | 2.30 |
| VQEIMIPAGK | AGLVIGKGGETIKQLQER | FUBP2_HUMAN | FUBP1_HUMAN | | Far upstream element- | -0.09 | 0.01 | 40.60 | -0.15 |
| GAPESVQKAK | MMLDDIVSR | FUBP2_HUMAN | | | Far upstream element- | -0.52 | 0.05 | 39.80 | 0.81 |
| APESVQKAKM | MLDDIVSR | FUBP2_HUMAN | | | Far upstream element-binding protein 2; | -0.55 | 0.06 | 29.40 | 2.95 |
| ESKKLASQGD | SISSQLGPIHPPPR | FUBP2_HUMAN | | | Far upstream element-binding protein 2; | -1.52 | 0.04 | 44.50 | 1.05 |
| PSVYGYGVQK | RPLDDGVGNQLGALVHQR | FUBP3_HUMAN | | | Far upstream element-binding protein 3; | 0.57 | 0.04 | 29.80 | 2.27 |
| FVQHFSQIVR | VLTEDEMGHPEIGDAIAR | FPPS_HUMAN | | | Farnesyl pyrophosphate synthase; | 6.38 | 0.94 | 50.40 | 3.18 |
| PEIPALLDGR | LQVVDQPLPVR | FAS_HUMAN | | | Fatty acid synthase; | 2.59 | 0.26 | 37.50 | 3.64 |
| VLHQATILPK | TGTVSLEVR | FAS_HUMAN | | | Fatty acid synthase; | 2.17 | 0.18 | 36.40 | -1.11 |
| QTKVTQQGLK | MVVPGLDGAQIPR | FAS_HUMAN | | | Fatty acid synthase; | 1.40 | 0.05 | 42.90 | 4.70 |
| SKADEASELA | CPTPKEDGLAQQQTQLNLR | FAS_HUMAN | | | Fatty acid synthase; | 0.59 | 0.04 | 63.60 | 1.29 |
| NTEGSFRCQC | LGGLAVGTDGR | FBN3_HUMAN | | | Fibrillin-3; | 5.16 | 0.49 | 26.90 | 4.31 |
| FPESSLKLV | STLFGNTKPR | FGFP1_HUMAN | | | Fibroblast growth factor-binding protein 1; | 3.60 | 0.36 | 21.80 | 2.18 |
| TSCLKLKDER | VYWKQVAR | FGFP1_HUMAN | | | Fibroblast growth factor-binding protein 1; | 3.53 | 0.39 | 33.20 | -0.09 |
| RKDFPESSLK | LVSSTLFGNTKPR | FGFP1_HUMAN | | | Fibroblast growth factor- | -0.55 | 0.05 | 17.50 | 1.54 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|--------------------------|-------------|------|------|-----------------------------------|---------------------------------|-----------------------|----------------------|------|
| NEHLKCVSKR | IANLQTDLSDGLR | FLNA_HUMAN | | | Filamin-A; | 7.52 | 1.10 | 59.00 | 3.39 |
| QTGGPHVKAR | VANPSGNLTETYVQDR | FLNA_HUMAN | | | Filamin-A; | 1.32 | 0.10 | 81.90 | 5.11 |
| DVTYDGPVVP | SSPFQVPVTEGCDPSR | FLNA_HUMAN | | | Filamin-A; | 0.99 | 0.07 | 55.80 | 6.06 |
| LHSVDTVYDG | SPVPSSPFQVPVTEGCDPSR | FLNA_HUMAN | | | Filamin-A; | 0.35 | 0.02 | 49.40 | 7.76 |
| PVPGSPFPLE | AVAPTKPSKVKAFGPGLQGGSAGS | FLNA_HUMAN | | | Filamin-A; | -0.02 | 0.00 | 37.30 | 4.11 |
| PGIEGQGVFR | EATTEFSVDAR | FLNA_HUMAN | | | Filamin-A; | -0.40 | 0.03 | 51.10 | 0.64 |
| TQTVNYVPSR | EGPYSISVLYGDEEVPR | FLNA_HUMAN | | | Filamin-A; | -0.80 | 0.04 | 99.50 | 3.70 |
| FNEEHIPDSP | FVVPVASPSGDAR | FLNA_HUMAN | | | Filamin-A; | -1.04 | 0.07 | 44.30 | 3.67 |
| EPVDVVDNAD | GTQTVNYVPSR | FLNA_HUMAN | | | Filamin-A; | -1.52 | 0.09 | 42.50 | 2.47 |
| SSSSRGSSYS | SIPKFSSDASKVVTR | FLNC_HUMAN | | | Filamin-C; | -0.32 | 0.02 | 45.50 | 3.59 |
| VRVEESTQVG | GDPFPAVFGDFLGR | FLNC_HUMAN | | | Filamin-C; | -0.52 | 0.08 | 63.00 | 0.20 |
| KSSSSRGSSY | SSIPKFSSDASKVVTR | FLNC_HUMAN | | | Filamin-C; | -0.65 | 0.02 | 53.70 | 1.54 |
| SYAECSVPIG | VTAPSLQPVQAR | FNBP4_HUMAN | | | Formin-binding protein 4; | -0.76 | 0.05 | 31.30 | 5.15 |
| GSLKTRFALL | TLAAGADGPPR | FJX1_HUMAN | | | Four-jointed box protein 1; | 1.18 | 0.06 | 47.80 | 7.64 |
| QSVYLMNLRK | SGTLGHPGSLDETTYER | FRDA_HUMAN | | | Frataxin, mitochondrial; | -0.96 | 0.07 | 58.80 | 1.29 |
| IFLPLLRGHS | LFTCEPITVPR | FZD6_HUMAN | | | Frizzled-6; | 5.78 | 0.36 | 26.40 | 7.53 |
| KKELSDIAHR | IVAPGKGILAADESTGSIKR | ALDOA_HUMAN | | | Fructose-bisphosphate aldolase A; | 3.42 | 0.11 | 28.70 | 0.56 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|----------------------|-------------|-------------|------|---|---------------------------------|-----------------------|----------------------|-------|
| NTEENRRFYR | QLLLTADDR | ALDOA_HUMAN | | | Fructose-bisphosphate aldolase A; | 2.87 | 0.13 | 35.60 | 0.65 |
| MP | YQYPALTPEQKKEISDIAHR | ALDOA_HUMAN | | | Fructose-bisphosphate aldolase A; | 0.15 | 0.01 | 30.80 | 2.75 |
| WRCVLKIGEH | TPSALAIMENANVLAR | ALDOA_HUMAN | | | Fructose-bisphosphate aldolase A; | -0.07 | 0.00 | 34.40 | 1.05 |
| ARYASICQQN | GIVPIVEPEILPDGDHDLKR | ALDOA_HUMAN | ALDOC_HUMAN | | Fructose-bisphosphate aldolase A; | -0.46 | 0.02 | 38.80 | 2.86 |
| MP | HSYPALSAEQKKEISDIALR | ALDOC_HUMAN | | | Fructose-bisphosphate aldolase A; | -0.37 | 0.03 | 33.30 | 3.54 |
| TDPQTLKPSG | FHEDDPFFYDEHTLR | FXVD5_HUMAN | | | FXVD domain-containing ion transport regulator 5; | 3.33 | 0.23 | 67.30 | 1.35 |
| QTLKPSGFHE | DDPFFYDEHTLR | FXVD5_HUMAN | | | FXVD domain-containing | 2.15 | 0.15 | 32.00 | 3.34 |
| DPQTLKPSGF | HEDDPFFYDEHTLR | FXVD5_HUMAN | | | FXVD domain-containing | 1.92 | 0.22 | 39.50 | 5.19 |
| LCALLAPGGA | YVLDDSDGLGR | GALC_HUMAN | | | Galactocerebrosidase; | 0.85 | 0.07 | 36.60 | 4.02 |
| M | ACGLVASNLNLKPGECLR | LEG1_HUMAN | | | Galectin-1; | 0.00 | 0.00 | 33.80 | 3.28 |
| RSTHTLDSLR | ELSEALGQIFDSQR | LG3BP_HUMAN | | | Galectin-3-binding protein; | 4.37 | 0.35 | 80.60 | 2.22 |
| AGVVCTNETR | STHTLDSLR | LG3BP_HUMAN | | | Galectin-3-binding | 3.86 | 0.36 | 31.80 | 1.61 |
| QSRGPLVKY | SSDYFQAPSDYR | LG3BP_HUMAN | | | Galectin-3-binding | 2.80 | 0.15 | 44.90 | 1.78 |
| VEIFYRGQWG | TVCDNLWDLTDASVVC | LG3BP_HUMAN | | | Galectin-3-binding protein; | 2.11 | 0.17 | 31.20 | -0.15 |
| KKTLQALEFH | TVPFQLLAR | LG3BP_HUMAN | | | Galectin-3-binding protein; | 1.62 | 0.07 | 25.00 | 2.59 |
| SCWNYGFSC | SDELPLGLTKSGGSDR | LG3BP_HUMAN | | | Galectin-3-binding protein; | 1.48 | 0.03 | 32.50 | 0.39 |
| TIQSCWNYGF | SCSSDELPLGLTKSGGSDR | LG3BP_HUMAN | | | Galectin-3-binding protein; | 1.39 | 0.04 | 37.00 | 1.41 |
| SRRGPLVKYS | SDYFQAPSDYR | LG3BP_HUMAN | | | Galectin-3-binding | 1.29 | 0.12 | 51.90 | 1.74 |
| VTDSWSARK | SQLVYQSR | LG3BP_HUMAN | | | Galectin-3-binding | 1.19 | 0.05 | 28.00 | 3.84 |
| RKSQLVYQSR | RGPLVKYSSDYFQAPSDYR | LG3BP_HUMAN | | | Galectin-3-binding | 1.16 | 0.05 | 33.10 | 5.20 |
| QSCWNYGFSC | SDELPLGLTKSGGSDR | LG3BP_HUMAN | | | Galectin-3-binding protein; | 1.08 | 0.02 | 47.90 | 0.96 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|-------------|--------------------------|-------------|------|------|---|---------------------------------|-----------------------|----------------------|-------|
| YQSRRGPLVK | YSSDYFQAPSDYR | LG3BP_HUMAN | | | Galectin-3-binding protein; | 1.08 | 0.16 | 63.70 | 2.95 |
| ETRSTHTLDL | SRELSEALGQIFDSQR | LG3BP_HUMAN | | | Galectin-3-binding protein; | 1.03 | 0.03 | 52.10 | 1.34 |
| THTLDLSREL | SEALGQIFDSQR | LG3BP_HUMAN | | | Galectin-3-binding protein; | 0.98 | 0.06 | 55.80 | 2.46 |
| WKEPGSNVTM | SVDAECVPMVR | LG3BP_HUMAN | | | Galectin-3-binding protein; | 0.75 | 0.05 | 48.20 | 2.63 |
| RRGPLVKYSS | DYFQAPSDYR | LG3BP_HUMAN | | | Galectin-3-binding protein; | -1.04 | 0.09 | 26.80 | 4.63 |
| RGPLVKYSSD | YFQAPSDYR | LG3BP_HUMAN | | | Galectin-3-binding | -2.72 | 0.72 | 20.50 | 0.68 |
| APAGPLIVPY | NLPLPGGVVPR | LEG3_HUMAN | | | Galectin-3; | 4.34 | 0.35 | 31.90 | -0.87 |
| VVSSVNTVAT | KTVEEAENIAVTSGVVR | SYUG_HUMAN | | | Gamma-synuclein; | 0.54 | 0.06 | 41.30 | -0.80 |
| VSEAVVSSVN | TVATKTVEEAENIAVTSGVVR | SYUG_HUMAN | | | Gamma-synuclein; | 0.37 | 0.02 | 77.90 | 6.14 |
| LLAAPAQ AHL | KKPSQLSSFSWDCDEGK DPAVIR | SAP3_HUMAN | | | Ganglioside GM2 | 0.45 | 0.02 | 52.00 | 6.65 |
| HLKKPSQLSS | FSWDCDEGK DPAVIR | SAP3_HUMAN | | | Ganglioside GM2 activator; | 0.13 | 0.01 | 40.20 | 2.19 |
| AHLKKPSQLS | SFSWDCDEGK DPAVIR | SAP3_HUMAN | | | Ganglioside GM2 activator; | -0.02 | 0.00 | 39.40 | 5.95 |
| KKGGVASGFK | HVVPNEVVVQR | GELS_HUMAN | | | Gelsolin; | 0.51 | 0.05 | 48.10 | 1.75 |
| ETLIKKRKAR | SLLPLSTSLDHR | GEMI5_HUMAN | | | Gem-associated protein 5; | 1.72 | 0.03 | 43.90 | 1.10 |
| RRKKYGIVLK | EFRPEDQPWLLR | T2FA_HUMAN | | | General transcription factor IIF subunit 1; | -0.26 | 0.01 | 27.90 | 0.68 |
| IHQGTMIPC | DFLIPVQTQHPIR | G6PI_HUMAN | | | Glucose-6-phosphate isomerase; | -0.52 | 0.02 | 33.20 | 4.38 |
| EELPLGRELR | VPLIGSLPEAR | QPCTL_HUMAN | | | Glutaminyl-peptide cyclotransferase-like | -1.29 | 0.13 | 29.00 | 4.80 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|---------------------|-------------|------------|------|---|---------------------------------|-----------------------|----------------------|-------|
| RHASSGSFLP | SANEHLKEDLNL | GLRX3_HUMAN | | | Glutaredoxin-3; | -0.02 | 0.00 | 28.40 | 4.69 |
| KNSQKIDRLD | GAHAPELTKKVQR | GLRX3_HUMAN | | | Glutaredoxin-3; | -0.32 | 0.01 | 26.80 | 4.86 |
| MPP | YTVVYFPVR | GSTP1_HUMAN | | | Glutathione S-transferase P; | 0.57 | 0.04 | 29.30 | -0.42 |
| QLPKFQDGL | TLYQSNTILR | GSTP1_HUMAN | | | Glutathione S-transferase | -0.19 | 0.01 | 43.70 | 2.09 |
| NGKLTGMAFR | VPTANVSVDLTCR | G3P_HUMAN | | | Glyceraldehyde-3-phosphate dehydrogenase; | 1.60 | 0.11 | 68.20 | 3.65 |
| KLTGMAFRVP | TANVSVDLTCR | G3P_HUMAN | | | Glyceraldehyde-3-phosphate dehydrogenase; | 0.81 | 0.06 | 59.10 | 2.34 |
| IIPASTGAAK | AVGKVIPELNGKLTGMAFR | G3P_HUMAN | | | Glyceraldehyde-3-phosphate dehydrogenase; | 0.17 | 0.00 | 37.50 | 1.63 |
| M | GKVKVGVNGFGR | G3P_HUMAN | | | Glyceraldehyde-3-phosphate dehydrogenase; | 0.06 | 0.00 | 58.80 | 2.57 |
| KAENGKLVIN | GNPITIFQER | G3P_HUMAN | | | Glyceraldehyde-3-phosphate dehydrogenase; | 0.04 | 0.00 | 44.50 | -3.80 |
| GMAFRVPTAN | VSVVDLTCR | G3P_HUMAN | G3PT_HUMAN | | Glyceraldehyde-3-phosphate dehydrogenase; | 0.04 | 0.00 | 23.30 | 2.12 |
| KFHGTVKAEN | GKLVINGNPITIFQER | G3P_HUMAN | | | Glyceraldehyde-3- | -0.04 | 0.00 | 34.70 | 7.28 |
| MAFRVPTANV | SVVDLTCR | G3P_HUMAN | G3PT_HUMAN | | Glyceraldehyde-3-phosphate dehydrogenase; | -0.11 | 0.01 | 26.20 | 1.64 |
| ELNGKLTGMA | FRVPTANVSVDLTCR | G3P_HUMAN | | | Glyceraldehyde-3-phosphate dehydrogenase; | -0.21 | 0.02 | 48.30 | 3.05 |
| LNGKLTGMAF | RVPTANVSVDLTCR | G3P_HUMAN | | | Glyceraldehyde-3- | -0.58 | 0.04 | 43.70 | 1.92 |
| GIVEGLMTTV | HAITATQKTVDGPSGKLWR | G3P_HUMAN | | | Glyceraldehyde-3-phosphate dehydrogenase; | -1.09 | 0.07 | 27.90 | -1.84 |
| EKRKQISVRG | LAGLGDVAEVR | PYGB_HUMAN | | | Glycogen phosphorylase, brain form; | 5.53 | 0.17 | 29.10 | -1.94 |
| SEKRKQISVR | GLAGLGDVAEVR | PYGB_HUMAN | | | Glycogen phosphorylase, | -1.04 | 0.09 | 63.40 | -1.86 |
| SGAISHLSLG | EIPAMAQPFSSEER | GLYG_HUMAN | | | Glycogenin-1; | -0.32 | 0.02 | 43.90 | 0.00 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|-------------------------|-------------|------|------|--|---------------------------------|-----------------------|----------------------|-------|
| LAILLVIFIF | TKVFLIDNLD TSAANR | XYLK_HUMAN | | | Glycosaminoglycan xylosylkinase; | 2.30 | 0.15 | 39.50 | 5.72 |
| LVIFFTKVF | LIDNLD TSAANR | XYLK_HUMAN | | | Glycosaminoglycan | 1.19 | 0.09 | 47.20 | 3.89 |
| QFWDTPVVK | LGEVVNTHGPEPDKDNIR | NMT1_HUMAN | | | Glycylpeptide N- | 0.87 | 0.06 | 35.80 | 1.77 |
| WDTQPVKLG | EVVNTHGPEPDKDNIR | NMT1_HUMAN | | | Glycylpeptide N-tetradecanoyltransferase | -0.34 | 0.04 | 34.00 | 2.16 |
| KKLPAQRTNR | AVALSSSVMCPDAR | GRN_HUMAN | | | Granulins; | 0.60 | 0.04 | 63.40 | 2.20 |
| PAQRTNRAVA | LSSSVMCPDAR | GRN_HUMAN | | | Granulins; | 0.20 | 0.01 | 39.10 | 0.72 |
| LTKLPAHTVG | DVKCDMEVSCPDGYTCCR | GRN_HUMAN | | | Granulins; | -0.46 | 0.04 | 69.40 | 0.56 |
| LVAAGRRAAG | ASVATELR | GROA_HUMAN | | | Growth-regulated alpha protein; | 3.01 | 0.22 | 26.70 | 2.86 |
| ALELRPRGEA | AEGPAAAAAAAAAAAAAGVGGEI | GDF11_HUMAN | | | Growth/differentiation factor 11; | 0.70 | 0.02 | 59.30 | -2.75 |
| GGHLHLRISR | AALPEGLPEASR | GDF15_HUMAN | | | Growth/differentiation factor 15; | 2.01 | 0.15 | 33.40 | 5.24 |
| GALSLAEASR | ASFPGPSELHSEDSR | GDF15_HUMAN | | | Growth/differentiation factor 15; | 0.17 | 0.00 | 36.00 | -0.18 |
| AQGEPVQVK | LVLVGDGGTGKTFVVKR | RAN_HUMAN | | | GTP-binding nuclear | 0.67 | 0.06 | 30.40 | 2.32 |
| TTACYFATIH | TDSSLLLADITDKFGQR | GUAD_HUMAN | | | Guanine deaminase; | -0.52 | 0.05 | 49.90 | 3.33 |
| IVTPRFSLSC | SETLMGELGNIKTR | GUAD_HUMAN | | | Guanine deaminase; | -0.55 | 0.02 | 36.60 | -0.77 |
| MCAA | QMPPLAHIFR | GUAD_HUMAN | | | Guanine deaminase; | -0.72 | 0.04 | 33.30 | 1.53 |
| NKTVMAHGCV | LSAEELNVFHER | GUAD_HUMAN | | | Guanine deaminase; | -1.29 | 0.10 | 50.80 | 1.35 |
| MCAAQ | MPPLAHIFR | GUAD_HUMAN | | | Guanine deaminase; | -1.80 | 0.06 | 15.60 | 2.59 |
| TACYFATIHT | DSSLLLADITDKFGQR | GUAD_HUMAN | | | Guanine deaminase; | -2.24 | 0.21 | 45.00 | 2.54 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|-------------------------|-------------|-------------|-------------|--|---------------------------------|-----------------------|----------------------|-------|
| FNESIVVDMK | SGFNLEELEKNNNAQSIR | GNL3_HUMAN | | | Guanine nucleotide-binding protein-like 3; | 0.72 | 0.04 | 40.60 | 2.49 |
| | M FLQYYLNEQGDR | NOP10_HUMAN | | | H/ACA ribonucleoprotein complex subunit 3; | 0.02 | 0.00 | 60.00 | 3.74 |
| AKKEVVAEVV | KAPQVVAEAAKTAKR | DKC1_HUMAN | | | H/ACA ribonucleoprotein | -0.83 | 0.03 | 32.80 | 4.45 |
| PSVEPVEEYD | YEDLKESSNSVSNHQLSGFDQAR | HBS1L_HUMAN | | | HBS1-like protein; | -3.24 | 0.61 | 37.00 | -1.38 |
| FNDSQRQATK | DAGVIAGLNVLR | HS71L_HUMAN | HSP71_HUMAN | | Heat shock 70 kDa protein 1-like; | 0.89 | 0.06 | 40.20 | -0.49 |
| GAIAGLNVLR | IINEPTAAAIAYGLDR | HSP71_HUMAN | HSP76_HUMAN | | Heat shock 70 kDa protein 1A/1B; | 4.25 | 0.55 | 42.10 | 1.46 |
| TLEPVEKALR | DAKLDKAQIHDLVLVGGSTR | HSP71_HUMAN | | | Heat shock 70 kDa protein 1A/1B; | 0.72 | 0.05 | 40.60 | -0.27 |
| KALRDAKLDK | AQIHDLVLVGGSTR | HSP71_HUMAN | | | Heat shock 70 kDa protein 1A/1B; | 0.17 | 0.01 | 43.40 | 1.93 |
| VPAYFNDSQR | QATKDAGTIAGLNVLR | HSP7C_HUMAN | | | Heat shock cognate 71 kDa protein; | 10.56 | 0.00 | 59.60 | -4.21 |
| SYVAFTDTER | LIGDAAKNQVAMNPTNTVFDKAR | HSP7C_HUMAN | | | Heat shock cognate 71 kDa protein; | 5.12 | 0.33 | 41.90 | 1.64 |
| EIIANDQGNR | TTPSYVAFTDTER | HSP7C_HUMAN | HS71L_HUMAN | HSP71_HUMAN | Heat shock cognate 71 | 1.84 | 0.10 | 63.80 | 6.26 |
| GTIAGLNVLR | IINEPTAAAIAYGLDKKVGAEER | HSP7C_HUMAN | | | Heat shock cognate 71 | 1.38 | 0.04 | 56.40 | 7.98 |
| DFYTSITRAR | FEELNADLFR | HSP7C_HUMAN | HSP72_HUMAN | | Heat shock cognate 71 kDa protein; | 1.27 | 0.07 | 29.40 | 2.03 |
| GIDFYTSITR | ARFEELNADLFR | HSP7C_HUMAN | HSP72_HUMAN | | Heat shock cognate 71 kDa protein; | 1.10 | 0.07 | 50.70 | 1.59 |
| EELNADLFRG | TLDPVEKALR | HSP7C_HUMAN | | | Heat shock cognate 71 kDa protein; | 0.93 | 0.06 | 20.30 | 2.97 |
| FEELNADLFR | GTLDPVEKALR | HSP7C_HUMAN | | | Heat shock cognate 71 kDa protein; | 0.71 | 0.03 | 25.40 | 1.34 |
| FNDSQRQATK | DAGTIAGLNVLR | HSP7C_HUMAN | | | Heat shock cognate 71 kDa protein; | 0.22 | 0.02 | 55.10 | 1.54 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|----------------------|-------------|-------------|-------------|---------------------------------------|---------------------------------|-----------------------|----------------------|-------|
| KALRDAKLDK | SQIHDIIVLVGGSTR | HSP7C_HUMAN | | | Heat shock cognate 71 | 0.09 | 0.01 | 47.40 | 1.98 |
| IGDAAKNQVA | MNPTNTVFDAGR | HSP7C_HUMAN | | | Heat shock cognate 71 | -0.04 | 0.00 | 29.50 | -1.86 |
| TIAGLNVLR | INEPTAAAIAYGLDKKVGAE | HSP7C_HUMAN | | | kDa protein; Heat shock cognate 71 | -0.43 | 0.02 | 32.90 | 3.27 |
| TTYSDNQPGV | LIQVYEGE | HSP7C_HUMAN | HS71L_HUMAN | HSP71_HUMAN | kDa protein; Heat shock cognate 71 | -2.24 | 0.21 | 36.00 | 2.98 |
| APAYSRALSR | QLSSGVSEIR | HSPB1_HUMAN | | | Heat shock protein beta-1; | 1.63 | 0.20 | 43.80 | 2.35 |
| AAPAYSRAL | RQLSSGVSEIR | HSPB1_HUMAN | | | Heat shock protein beta-1; | -0.52 | 0.05 | 32.30 | 1.97 |
| EFRALLFVPR | RAPFDLFENR | HS90A_HUMAN | | | Heat shock protein HSP 90-alpha; | 3.26 | 0.28 | 21.30 | 2.86 |
| LIPEYLNFR | GVVDSIDLPLNISR | HS90A_HUMAN | H90B3_HUMAN | HS90B_HUMAN | Heat shock protein HSP 90-alpha; | 2.60 | 0.19 | 75.50 | 2.72 |
| QKHIYYITGE | TKDQVANSFAVER | HS90A_HUMAN | | | Heat shock protein HSP 90-alpha; | 2.25 | 0.17 | 55.60 | 2.54 |
| WEDHLAVKHF | SVEGQLEFR | HS90A_HUMAN | H90B3_HUMAN | HS902_HUMAN | Heat shock protein HSP 90-alpha; | 0.48 | 0.03 | 37.30 | 1.18 |
| MGYMAAKKHL | EINPDHSIIETLR | HS90A_HUMAN | | | Heat shock protein HSP 90-alpha; | 0.15 | 0.01 | 35.30 | 2.48 |
| NSTMGYMAAK | KHLEINPDHSIIETLR | HS90A_HUMAN | | | Heat shock protein HSP 90-alpha; | 0.06 | 0.00 | 37.30 | 2.74 |
| RRIKEIVKKH | SQFIGYPITLFVEKER | HS90A_HUMAN | | | Heat shock protein HSP 90-alpha; | 0.02 | 0.00 | 48.90 | 4.84 |
| STMGYMAAKK | HLEINPDHSIIETLR | HS90A_HUMAN | | | Heat shock protein HSP 90-alpha; | -0.04 | 0.00 | 41.90 | 1.76 |
| VKDLVILLYE | TALLSSGFSLEDPQTHANR | HS90A_HUMAN | | | Heat shock protein HSP 90-alpha; | -0.19 | 0.01 | 52.90 | 2.94 |
| VILLYETALL | SSGFSLEDPQTHANR | HS90A_HUMAN | | | Heat shock protein HSP 90-alpha; | -0.32 | 0.03 | 33.50 | 0.00 |
| TMGYMAAKKH | LEINPDHSIIETLR | HS90A_HUMAN | | | Heat shock protein HSP 90-alpha; | -0.43 | 0.02 | 33.10 | 0.71 |
| GYMAAKKHLE | INPDHSIIETLR | HS90A_HUMAN | | | Heat shock protein HSP 90-alpha; | -0.46 | 0.03 | 32.50 | 3.74 |
| HNDDEQYAW | SSAGGSFTVR | HS90A_HUMAN | HS902_HUMAN | HS90B_HUMAN | Heat shock protein HSP 90-alpha; | -0.46 | 0.03 | 36.10 | 8.02 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|-------------|------------------------|-------------|-------------|-------------|--|---------------------------------|-----------------------|----------------------|-------|
| KHNDDEQYAW | ESSAGGSFTVR | HS90A_HUMAN | HS902_HUMAN | HS90B_HUMAN | Heat shock protein HSP 90-alpha; | -1.04 | 0.07 | 32.80 | 4.06 |
| ALLFVPRRAP | FDLFENR | HS90A_HUMAN | | | Heat shock protein HSP 90-alpha; | -1.65 | 0.10 | 20.40 | 1.54 |
| ERRIKEIVKK | HSQFIGYPITLFVEKER | HS90A_HUMAN | | | Heat shock protein HSP 90-alpha; | -2.24 | 0.11 | 29.40 | 4.31 |
| RMKENQKHIY | YITGETKDQVANSASFVER | HS90A_HUMAN | | | Heat shock protein HSP | -3.46 | 0.38 | 54.60 | 2.10 |
| IMDSCDELIP | EYLNFR | HS90A_HUMAN | HS904_HUMAN | HS90B_HUMAN | Heat shock protein HSP | -4.04 | 0.00 | 26.20 | 2.22 |
| TRMKENQKHI | YYITGETKDQVANSASFVER | HS90A_HUMAN | | | Heat shock protein HSP 90-alpha; | -4.47 | 0.00 | 33.50 | 3.58 |
| STMGYMMAKK | HLEINPDHPIVETLR | HS90B_HUMAN | | | Heat shock protein HSP 90-beta; | 0.28 | 0.01 | 50.80 | 1.98 |
| YVSRMKETQK | SIYYITGESKEQVANSASFVER | HS90B_HUMAN | | | Heat shock protein HSP 90-beta; | -0.09 | 0.01 | 78.60 | 1.34 |
| FNDSQRQATK | DAGTITGLNVLR | HSP72_HUMAN | | | Heat shock-related 70 kDa protein 2; | 1.74 | 0.10 | 40.00 | -2.70 |
| LSPADKTNVK | AAWGKVG AHAGEYGAEALER | HBA_HUMAN | | | Hemoglobin subunit alpha; | 0.50 | 0.04 | 48.20 | 0.71 |
| KTNVKA AWGK | VGAHAGEYGAEALER | HBA_HUMAN | | | Hemoglobin subunit alpha; | -0.04 | 0.00 | 59.20 | 1.28 |
| QLSELHCDKL | HVDPENFR | HBB_HUMAN | HBD_HUMAN | | Hemoglobin subunit beta; | -0.80 | 0.07 | 23.30 | -0.38 |
| VVAGSVCFML | ILYQYAGPGLSLGAPGGR | H6ST1_HUMAN | | | Heparan-sulfate 6-O-sulfotransferase 1; | 0.54 | 0.07 | 41.40 | 4.34 |
| DEDDEDRGVM | AVTAVTATAASDR | HDGR2_HUMAN | | | Hepatoma-derived growth factor-related protein 2; | -0.52 | 0.08 | 47.00 | 5.68 |
| IQGHRVEVKK | AVPKEDIYSGGGGGSR | ROA0_HUMAN | | | Heterogeneous nuclear ribonucleoprotein A0; | -0.02 | 0.00 | 50.20 | 6.14 |
| ESPKEPEQLR | KLFIGGLSFETTDESLR | RA1L2_HUMAN | ROA1_HUMAN | | Heterogeneous nuclear ribonucleoprotein A1-like | 1.11 | 0.02 | 49.90 | 4.08 |
| PGAHVTVKKL | FVGGIKEDTEEHHLR | RA1L2_HUMAN | ROA1_HUMAN | ROA2_HUMAN | Heterogeneous nuclear ribonucleoprotein A1-like 2; | -0.52 | 0.04 | 27.00 | 2.99 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|-------------|-------------------------|-------------|-------------|-------------|---|---------------------------------|-----------------------|----------------------|-------|
| LRDYFEQYGK | IEVIEIMTDR | RA1L2_HUMAN | ROA1_HUMAN | | Heterogeneous nuclear ribonucleoprotein A1-like | -1.40 | 0.15 | 26.70 | 5.18 |
| HDPKEPEQLR | KLFIGGLSFETDDSLR | ROA3_HUMAN | | | Heterogeneous nuclear ribonucleoprotein A3; | 0.22 | 0.01 | 52.20 | 8.74 |
| GGLSWDTSKK | DLTEYLSR | HNRDL_HUMAN | | | Heterogeneous nuclear | 0.51 | 0.04 | 33.30 | -0.68 |
| EIQKEYFGAF | GEIENIELPMDTKTNER | HNRDL_HUMAN | | | Heterogeneous nuclear | -0.29 | 0.02 | 44.70 | 2.14 |
| AMKTKEPVKK | IFVGGLSPDTPEEKIR | HNRPD_HUMAN | | | Heterogeneous nuclear ribonucleoprotein D0; | 0.61 | 0.02 | 52.70 | 3.99 |
| GPYDRPGTAR | RYIGIVKQAGLER | HNRPF_HUMAN | | | Heterogeneous nuclear ribonucleoprotein F; | 0.28 | 0.02 | 43.30 | 3.18 |
| MGHRYVEVFK | SNNVEMDWVLKHTGPNSPDTANL | HNRH1_HUMAN | | | Heterogeneous nuclear ribonucleoprotein H; | 1.89 | 0.16 | 36.40 | 2.84 |
| CVHMRGLPYK | ATENDIYNFFSPLNPVR | HNRH1_HUMAN | HNRPF_HUMAN | | Heterogeneous nuclear ribonucleoprotein H; | 0.68 | 0.12 | 58.10 | 3.01 |
| NFFSPLNPVR | VHIEIGPDGR | HNRH1_HUMAN | HNRH2_HUMAN | HNRPF_HUMAN | Heterogeneous nuclear ribonucleoprotein H; | 0.28 | 0.02 | 36.30 | 3.19 |
| TEGGEFVVK | VRGLPWSCSADEVQR | HNRH1_HUMAN | | | Heterogeneous nuclear ribonucleoprotein H; | -0.16 | 0.01 | 62.30 | 2.00 |
| GGEGFVVKVR | GLPWSCSADEVQR | HNRH1_HUMAN | | | Heterogeneous nuclear | -0.19 | 0.01 | 48.10 | 5.02 |
| NSVEMDWVLK | HTGPNSPDTANDGFVR | HNRH1_HUMAN | HNRH2_HUMAN | | Heterogeneous nuclear | -0.40 | 0.04 | 58.00 | 3.60 |
| VFKSNSVEMD | WVLKHTGPNSPDTANDGFVR | HNRH1_HUMAN | HNRH2_HUMAN | | Heterogeneous nuclear | -1.52 | 0.09 | 52.30 | 4.58 |
| TWSPSEWQMA | YEPQGGSGYDYSYAGGR | HNRPK_HUMAN | | | Heterogeneous nuclear | 1.45 | 0.13 | 52.90 | 1.67 |
| VELRILLQSK | NAGAVIGKGGKNIKALR | HNRPK_HUMAN | | | Heterogeneous nuclear ribonucleoprotein K; | 1.03 | 0.08 | 26.00 | 4.27 |
| RGGRGGSRAR | NLPLPPPPPPR | HNRPK_HUMAN | | | Heterogeneous nuclear | 1.00 | 0.01 | 33.40 | 3.25 |
| VKGAKIKELR | ENTQTTIKLFQECCPHSTDR | HNRPK_HUMAN | | | Heterogeneous nuclear ribonucleoprotein K; | 0.51 | 0.03 | 44.70 | 1.03 |
| GNVEKVKFMK | SKPGAAMVEMADGYAVDR | HNRPL_HUMAN | | | Heterogeneous nuclear | 0.30 | 0.01 | 60.60 | 2.84 |
| LVKEKVG EVT | YVELLMDAEGKSR | HNRPM_HUMAN | | | Heterogeneous nuclear | 0.51 | 0.03 | 36.30 | 6.07 |
| RGNFGGSFAG | SFGGAGGHAPGVAR | HNRPM_HUMAN | | | Heterogeneous nuclear ribonucleoprotein M; | 0.06 | 0.01 | 36.50 | 1.65 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|-------------------------|-------------|-----------|-----------|---|---------------------------------|-----------------------|----------------------|-------|
| DYYGYEDYYD | YYGYDYHNYR | HNRPQ_HUMAN | | | Heterogeneous nuclear ribonucleoprotein Q; | -1.00 | 0.06 | 26.10 | 3.31 |
| EFGKLERVKK | LKDYAFVHFEDR | HNRPR_HUMAN | | | Heterogeneous nuclear | 0.30 | 0.03 | 39.40 | 3.38 |
| MKINEEISVK | HLPSTEPDPHVVR | HNRL1_HUMAN | | | Heterogeneous nuclear ribonucleoprotein U-like | 0.64 | 0.02 | 32.90 | 3.55 |
| AEPGGYSGPD | GHYAMDNITR | HNRL1_HUMAN | | | Heterogeneous nuclear ribonucleoprotein U-like | -2.58 | 0.16 | 24.60 | 3.13 |
| RGAAKEAAGK | SSGPTSLFAVTVAPPGAR | HNRPU_HUMAN | | | Heterogeneous nuclear ribonucleoprotein U; | 0.83 | 0.02 | 54.70 | 3.14 |
| GKSSGPTSLF | AVTVAPPGAR | HNRPU_HUMAN | | | Heterogeneous nuclear | 0.56 | 0.02 | 28.20 | 4.55 |
| RKKREKEQFR | KLFIGGLSFETTEESLR | ROA2_HUMAN | | | Heterogeneous nuclear ribonucleoproteins A2/B1; | 0.83 | 0.02 | 46.90 | -0.55 |
| MEK | TLETVPLER | ROA2_HUMAN | | | Heterogeneous nuclear ribonucleoproteins A2/B1; | 0.48 | 0.04 | 23.70 | -0.55 |
| LRDYFEEYGK | IDTIEITDR | ROA2_HUMAN | | | Heterogeneous nuclear ribonucleoproteins A2/B1; | 0.15 | 0.01 | 26.00 | 6.24 |
| TEEHHLRDYF | EEYGKIDTIEITDR | ROA2_HUMAN | | | Heterogeneous nuclear ribonucleoproteins A2/B1; | -0.21 | 0.01 | 37.00 | 1.73 |
| DTEEHHLRDY | FEEYGKIDTIEITDR | ROA2_HUMAN | | | Heterogeneous nuclear ribonucleoproteins A2/B1; | -0.49 | 0.03 | 38.50 | 1.85 |
| HLRDYFEEYG | KIDTIEITDR | ROA2_HUMAN | | | Heterogeneous nuclear | -0.65 | 0.05 | 37.40 | 2.16 |
| EHHLRDYFEE | YGKIDTIEITDR | ROA2_HUMAN | | | Heterogeneous nuclear | -0.88 | 0.03 | 51.70 | 0.62 |
| YYDRMYSYPA | RVPPPPPIAR | HNRPC_HUMAN | | | Heterogeneous nuclear ribonucleoproteins C1/C2; | -1.80 | 0.19 | 37.50 | 4.08 |
| TGVRGGQVRG | AAGVTDGNEVAKAQQATPGGAAP | HINT2_HUMAN | | | Histidine triad nucleotide- | 0.31 | 0.03 | 92.60 | 6.78 |
| FTDVKRPGYR | VKEIGSTMSGR | SAP18_HUMAN | | | Histone deacetylase complex subunit SAP18; | 0.13 | 0.01 | 26.20 | -1.31 |
| VGMSLVALKK | ALAAAGYDVEKNNSR | H11_HUMAN | H12_HUMAN | H13_HUMAN | Histone H1.1; | -0.07 | 0.01 | 42.10 | -1.15 |
| ARKSAGAAKR | KASGPPVSELITKAVAASKER | H12_HUMAN | H13_HUMAN | H14_HUMAN | Histone H1.2; | 0.33 | 0.01 | 44.40 | 3.64 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|-------------|-----------------------|-------------|-------------|-------------|---|---------------------------------|-----------------------|----------------------|-------|
| RKSAGAAKRK | ASGPPVSELITKAVAASKER | H12_HUMAN | H13_HUMAN | H14_HUMAN | Histone H1.2; | -1.04 | 0.02 | 52.00 | 1.80 |
| AAGAGAAKRK | ATGPPVSELITKAVAASKER | H15_HUMAN | | | Histone H1.5; | 0.18 | 0.00 | 37.00 | 2.30 |
| RNGLSLAALK | KALAAGGYDVEKNNSR | H15_HUMAN | | | Histone H1.5; | 0.00 | 0.00 | 30.30 | 3.00 |
| KAAGAGAAKR | KATGPPVSELITKAVAASKER | H15_HUMAN | | | Histone H1.5; | -0.21 | 0.01 | 29.50 | 4.23 |
| YMAAVLEYLT | AEILELAGNAAR | H2A1B_HUMAN | H2A1C_HUMAN | H2A1D_HUMAN | Histone H2A type 1-B/E; | -1.72 | 0.23 | 47.90 | 4.51 |
| ISSKAMGIMN | SFVNDIFER | H2B1B_HUMAN | H2B1C_HUMAN | H2B1D_HUMAN | Histone H2B type 1-B; | -0.19 | 0.01 | 33.10 | 5.60 |
| RLARRGGVKR | ISGLIYEETR | H4_HUMAN | | | Histone H4; | 2.40 | 0.13 | 40.20 | 1.82 |
| SRPGRGEPFR | IAVGYVDDTQFVR | 1A01_HUMAN | 1A02_HUMAN | 1A03_HUMAN | HLA class I | 1.13 | 0.07 | 62.90 | 2.84 |
| SRPGAGEPRF | ISVGYVDDTQFVR | 1B07_HUMAN | 1B08_HUMAN | 1B14_HUMAN | HLA class I | 1.52 | 0.12 | 47.30 | 5.28 |
| RPGAGEPRFI | SVGYYVDDTQFVR | 1B07_HUMAN | 1B08_HUMAN | 1B14_HUMAN | HLA class I histocompatibility | 1.48 | 0.09 | 72.30 | -0.77 |
| AGEPRFISVG | YVDDTQFVR | 1B07_HUMAN | 1A01_HUMAN | 1A02_HUMAN | HLA class I | 0.11 | 0.01 | 32.40 | 1.44 |
| PGAGEPRFIS | VGYYVDDTQFVR | 1B07_HUMAN | 1A01_HUMAN | 1A02_HUMAN | HLA class I histocompatibility | -0.07 | 0.00 | 35.60 | 3.07 |
| SVGYYVDDTQF | VRFSDAASPR | 1C06_HUMAN | 1B07_HUMAN | 1B08_HUMAN | HLA class I histocompatibility | 0.37 | 0.02 | 37.70 | 5.52 |
| DYIALNEDLR | SWTAADTAAQITQR | 1C07_HUMAN | 1B07_HUMAN | 1B08_HUMAN | HLA class I histocompatibility | 0.71 | 0.09 | 63.30 | -1.29 |
| GDGTFQKWAA | VVVPSGQEQR | 1C07_HUMAN | 1A02_HUMAN | 1A25_HUMAN | antigen, Cw-7 alpha HLA class I | 0.02 | 0.00 | 30.90 | 7.18 |
| LLMLGMGCWA | REVLVPEGPLYR | IGSF8_HUMAN | | | Immunoglobulin superfamily member 8; | -0.43 | 0.02 | 37.10 | 1.50 |
| EAAMFDSLML | DSYVSSTTGESVITR | IMA7_HUMAN | | | Importin subunit alpha-7; | -0.14 | 0.01 | 68.30 | 1.71 |
| LPTFLVELSR | VLANPGNSQVAR | IMB1_HUMAN | | | Importin subunit beta-1; | 3.31 | 0.35 | 48.10 | 7.01 |
| LLPLLGGTQT | AIVFIKQPSSQDALQGR | PTK7_HUMAN | | | Inactive tyrosine-protein kinase 7; | 0.00 | 0.00 | 70.00 | 1.82 |
| ANEILQRSKK | GKLPIVNEDDELVAIIAR | IMDH2_HUMAN | | | Inosine-5'-monophosphate | 1.01 | 0.04 | 49.80 | 2.52 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|--------------------------|-------------|------|------|---|---------------------------------|-----------------------|----------------------|-------|
| LTVQVGVTAG | APWQCAPCSAEKLALCPPVSASCS | IBP1_HUMAN | | | Insulin-like growth factor-binding protein 1; | 0.18 | 0.00 | 54.20 | 4.73 |
| FRCPPCTPER | LAACGPPPVAPPAVAAVAGGAR | IBP2_HUMAN | | | Insulin-like growth factor- | 6.58 | 0.72 | 47.90 | 7.82 |
| PKKLRPPPAR | TPCQQELDQVLER | IBP2_HUMAN | | | Insulin-like growth factor- | 2.80 | 0.28 | 55.30 | 3.71 |
| GGGGARAEVL | FRCPPCTPER | IBP2_HUMAN | | | Insulin-like growth factor-binding protein 2; | 2.47 | 0.12 | 30.90 | 2.22 |
| GGGAGRKPLK | SGMKELAVFR | IBP2_HUMAN | | | Insulin-like growth factor-binding protein 2; | 0.92 | 0.06 | 20.70 | 2.90 |
| LLRGPPVARA | GASSAGLGPVVR | IBP3_HUMAN | | | Insulin-like growth factor-binding protein 3; | 3.60 | 0.30 | 55.50 | 1.82 |
| LRGPPVARAG | ASSAGLGPVVR | IBP3_HUMAN | | | Insulin-like growth factor-binding protein 3; | 3.53 | 0.32 | 43.40 | -0.48 |
| PPCSEEKLAR | CRPPVGCCELVR | IBP4_HUMAN | | | Insulin-like growth factor-binding protein 4; | 1.03 | 0.06 | 49.40 | 1.60 |
| LAAGPGPSLG | DEAIHCPPCSEEKLAR | IBP4_HUMAN | | | Insulin-like growth factor- | 0.48 | 0.03 | 45.80 | -0.35 |
| QDTEMGPCRR | HLDSVLQQLQTEVYR | IBP6_HUMAN | | | Insulin-like growth factor-binding protein 6; | 3.62 | 0.13 | 58.30 | 2.04 |
| EMGPCRRHLD | SVLQQLQTEVYR | IBP6_HUMAN | | | Insulin-like growth factor- | 2.61 | 0.20 | 67.30 | 1.60 |
| LQQLQTEVYR | GAQTLYVPNCDHR | IBP6_HUMAN | | | Insulin-like growth factor-binding protein 6; | 2.34 | 0.16 | 37.50 | -1.03 |
| LAASPGGALA | RCPGCGQGVQAGCPGGCVEEEDG | IBP6_HUMAN | | | Insulin-like growth factor- | 2.25 | 0.21 | 69.10 | 5.68 |
| LAASPGGALA | RCPGCGQGVQAGCPGGCVEEEDG | IBP6_HUMAN | | | Insulin-like growth factor-binding protein 6; | 2.24 | 0.14 | 81.60 | 9.65 |
| RETIKGIQKR | EASNCFAIR | ITM2B_HUMAN | | | Integral membrane protein | 0.46 | 0.04 | 43.60 | 1.63 |
| ETIKGIQKRE | ASNCFAIR | ITM2B_HUMAN | | | Integral membrane protein | -1.72 | 0.11 | 26.10 | 1.45 |
| QGQRIGHFEF | HGDHALLCVR | GP180_HUMAN | | | Integral membrane protein | -2.05 | 0.17 | 27.80 | 4.45 |
| GGGQGPPVPT | LAAAKKAKSETVLTCATGR | ITA3_HUMAN | | | Integrin alpha-3; | 1.26 | 0.11 | 32.90 | 1.72 |
| GQGPPVTLA | AAKKAKSETVLTCATGR | ITA3_HUMAN | | | Integrin alpha-3; | 0.46 | 0.02 | 32.80 | 3.88 |
| PFLVDGLTLG | AQHLEAGGSLTR | ITB4_HUMAN | | | Integrin beta-4; | 0.63 | 0.05 | 41.00 | 1.25 |
| LDRSFTSQML | SSQPPPHGDLGAPQNPNAKAAGSF | ITB4_HUMAN | | | Integrin beta-4; | 0.53 | 0.02 | 63.30 | 3.01 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|-------------------------|-------------|-------------|------|---|---------------------------------|-----------------------|----------------------|-------|
| RSFTSQMLSS | QPPPHGDLGAPQNPNAKAAGSR | ITB4_HUMAN | | | Integrin beta-4; | -0.09 | 0.01 | 68.40 | 4.13 |
| DRSFTSQMLS | SQPPPHGDLGAPQNPNAKAAGSR | ITB4_HUMAN | | | Integrin beta-4; | -0.21 | 0.01 | 52.30 | 0.81 |
| IVDTVLMAPR | SAKPALLKLTEKQVEQR | ITB4_HUMAN | | | Integrin beta-4; | -0.26 | 0.01 | 22.50 | 1.59 |
| VEQRAFHDLK | VAPGYTTLTADQDAR | ITB4_HUMAN | | | Integrin beta-4; | -0.65 | 0.06 | 64.30 | 6.17 |
| EPVHPASLPD | SSLATSAPLCCTLCHER | I2BP2_HUMAN | | | Interferon regulatory | -0.24 | 0.01 | 36.10 | 3.55 |
| EPCPQPLRSP | SLDNPTFPNLPSENPLKR | IRF3_HUMAN | | | Interferon regulatory factor 3; | 1.94 | 0.06 | 30.90 | 2.39 |
| PSDKVLIQEK | TQLKGSELEITLTR | SYIC_HUMAN | | | Isoleucine--tRNA ligase, Isovaleryl-CoA | 1.25 | 0.09 | 46.00 | 3.13 |
| PLAGFVSQRA | HSLLPVDDAINGLSEEQR | IVD_HUMAN | | | dehydrogenase, mitochondrial; | -0.37 | 0.02 | 64.30 | 4.34 |
| VMAEAPPGVE | TDLIDVGFTDDVKKGGPGR | IST1_HUMAN | | | IST1 homolog; | 0.92 | 0.05 | 53.50 | 3.76 |
| AILLCSLALG | SVTVHSSEPEVR | JAM1_HUMAN | | | Junctional adhesion molecule A; | -0.76 | 0.04 | 25.70 | 4.62 |
| QLRLALLVAA | GAPEVLVSAPR | KDEL2_HUMAN | | | KDEL motif-containing protein 2; | 0.15 | 0.01 | 49.10 | 3.89 |
| GGGVSSLRI | SSSKGSLGGFSSGGFSGGSFSR | K1C10_HUMAN | | | Keratin, type I | 1.78 | 0.17 | 74.60 | -1.25 |
| GYGSSFGGVD | GLLAGGEKATMQNLNDR | K1C17_HUMAN | | | Keratin, type I cytoskeletal 17; | -1.14 | 0.10 | 59.80 | 1.94 |
| HYFKIIEDLR | AQIFANTVDNAR | K1C18_HUMAN | | | Keratin, type I cytoskeletal 18; | 4.33 | 0.51 | 51.20 | 2.82 |
| ILGATIENSR | IVLQIDNAR | K1C18_HUMAN | K1C19_HUMAN | | Keratin, type I cytoskeletal 18; | 2.71 | 0.18 | 32.60 | 0.56 |
| MQTIQKTTTR | RIVDGKVVSETNDTKVLR | K1C18_HUMAN | | | Keratin, type I cytoskeletal 18; | 0.75 | 0.07 | 34.00 | 0.98 |
| LGSVQAPSYG | ARPVSSAASVYAGAGGSGSR | K1C18_HUMAN | | | Keratin, type I cytoskeletal 18; | 0.70 | 0.06 | 83.90 | 2.23 |
| TFSTNYRSLG | SVQAPSYGARPVSSAASVYAGAG | K1C18_HUMAN | | | Keratin, type I | 0.67 | 0.06 | 71.80 | 2.70 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|------------------------|-------------|------|------|----------------------------------|---------------------------------|-----------------------|----------------------|-------|
| STTVTTQSA | EVGAAETTLTEL | K1C18_HUMAN | | | Keratin, type I cytoskeletal 18; | 0.64 | 0.06 | 64.30 | 3.51 |
| SLGSVQAPSY | GARPVSSAASVYAGAGGSGSR | K1C18_HUMAN | | | Keratin, type I cytoskeletal 18; | 0.37 | 0.03 | 100.40 | 2.05 |
| VQAPSYGARP | VSSAASVYAGAGGSGSR | K1C18_HUMAN | | | Keratin, type I cytoskeletal 18; | 0.35 | 0.04 | 99.00 | 5.49 |
| TRSTFSTNYR | SLGSVQAPSYGAR | K1C18_HUMAN | | | Keratin, type I | 0.28 | 0.06 | 63.70 | 3.18 |
| GSVQAPSYGA | RPVSSAASVYAGAGGSGSR | K1C18_HUMAN | | | Keratin, type I cytoskeletal 18; | 0.06 | 0.01 | 49.50 | 3.78 |
| APSYGARPV | SAASVYAGAGGSGSR | K1C18_HUMAN | | | Keratin, type I | -0.21 | 0.01 | 85.10 | 4.50 |
| IEESTTVVTT | QSAEVGAAETTLTEL | K1C18_HUMAN | | | Keratin, type I cytoskeletal 18; | -0.24 | 0.02 | 84.80 | 4.79 |
| QIEESTTVVT | TQSAEVGAAETTLTELRR | K1C18_HUMAN | | | Keratin, type I cytoskeletal 18; | -0.24 | 0.02 | 38.20 | 0.36 |
| IEESTTVVTT | QSAEVGAAETTLTELRR | K1C18_HUMAN | | | Keratin, type I cytoskeletal 18; | -0.29 | 0.02 | 28.20 | 0.59 |
| QAPSYGARPV | SSAASVYAGAGGSGSR | K1C18_HUMAN | | | Keratin, type I cytoskeletal 18; | -0.32 | 0.02 | 80.30 | 1.13 |
| SVENDIHGLR | KVIDDTNITR | K1C18_HUMAN | | | Keratin, type I | -0.37 | 0.06 | 18.90 | 5.15 |
| TTVVTTQSAE | VGAAETTLTEL | K1C18_HUMAN | | | Keratin, type I cytoskeletal 18; | -0.40 | 0.04 | 34.10 | 5.56 |
| TGIAGGLAGM | GGIQNEKETMQLNDR | K1C18_HUMAN | | | Keratin, type I cytoskeletal 18; | -0.49 | 0.04 | 49.70 | 5.87 |
| LATGIAGGLA | GMGGIQNEKETMQLNDR | K1C18_HUMAN | | | Keratin, type I cytoskeletal 18; | -0.52 | 0.03 | 44.30 | 3.71 |
| EESTTVVTTQ | SAEVGAAETTLTELRR | K1C18_HUMAN | | | Keratin, type I cytoskeletal 18; | -0.80 | 0.06 | 34.90 | 1.61 |
| EESTTVVTTQ | SAEVGAAETTLTEL | K1C18_HUMAN | | | Keratin, type I cytoskeletal 18; | -0.80 | 0.07 | 81.00 | 3.73 |
| QIEESTTVVT | TQSAEVGAAETTLTEL | K1C18_HUMAN | | | Keratin, type I | -0.80 | 0.08 | 84.90 | 4.42 |
| ESTTVVTTQS | AEVGAAETTLTEL | K1C18_HUMAN | | | Keratin, type I | -0.88 | 0.08 | 81.60 | 3.21 |
| GMGSGGLATG | IAGGLAGMGGIQNEKETMQLND | K1C18_HUMAN | | | Keratin, type I | -1.00 | 0.08 | 51.00 | -0.35 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|--------------------------|-------------|------|------|--------------------------------------|---------------------------------|-----------------------|----------------------|-------|
| DLAKIMADIR | AQYDELAR | K1C18_HUMAN | | | Keratin, type I | -1.14 | 0.05 | 29.90 | 2.70 |
| VVTTQSAEVG | AAETTLTELRL | K1C18_HUMAN | | | Keratin, type I | -1.19 | 0.11 | 43.80 | 2.81 |
| YWSQQIEEST | TVVTTQSAEVGAAETTLTELRL | K1C18_HUMAN | | | Keratin, type I | -1.19 | 0.11 | 79.90 | 2.35 |
| NEKETMQSLN | DRLASYLDR | K1C18_HUMAN | | | Keratin, type I | -1.34 | 0.07 | 35.70 | 2.18 |
| YWSQQIEEST | TVVTTQSAEVGAAETTLTELRR | K1C18_HUMAN | | | Keratin, type I cytoskeletal 18; | -1.34 | 0.10 | 25.00 | 5.40 |
| GIAGGLAGMG | GIQNEKETMQSLNDR | K1C18_HUMAN | | | Keratin, type I cytoskeletal 18; | -1.52 | 0.13 | 36.50 | 0.00 |
| SGLTVEVDAP | KSQDLAKIMADIR | K1C18_HUMAN | | | Keratin, type I | -1.65 | 0.05 | 38.30 | 4.51 |
| RGGMGSGGLA | TGIAGGLAGMGGIQNEKETMQSLN | K1C18_HUMAN | | | Keratin, type I cytoskeletal 18; | -1.72 | 0.11 | 72.40 | 3.09 |
| GYGGVLTASD | GLLAGNEKLTMQNLNDR | K1C19_HUMAN | | | Keratin, type I cytoskeletal 19; | 3.32 | 0.25 | 33.10 | 3.70 |
| INQSLLAPLR | LDADPSLQR | K2C7_HUMAN | | | Keratin, type II cytoskeletal 7; | -1.80 | 0.13 | 23.70 | -1.72 |
| AQEREQIKVL | NDKFASFIDKVR | K2C74_HUMAN | | | Keratin, type II cytoskeletal 74; | 3.85 | 0.21 | 29.40 | 3.04 |
| YMNKVELESR | LEGLTDEINFLR | K2C8_HUMAN | | | Keratin, type II | 4.27 | 0.32 | 66.70 | 4.90 |
| NKVELESRL | GLTDEINFLR | K2C8_HUMAN | | | Keratin, type II | 2.32 | 0.14 | 39.80 | 4.37 |
| AEIEGLKGQR | ASLEAAIADAEQR | K2C8_HUMAN | | | Keratin, type II cytoskeletal 8; | 0.74 | 0.06 | 59.40 | -1.23 |
| ISEMNRNISR | LQAEIEGLKGQR | K2C8_HUMAN | | | Keratin, type II | 0.51 | 0.03 | 22.20 | 2.86 |
| TAVTVNQSL | SPLVLEVDPNIQAVR | K2C8_HUMAN | | | Keratin, type II cytoskeletal 8; | 0.22 | 0.01 | 75.90 | 3.75 |
| SSFSRTSSSR | AVVVKKIETR | K2C8_HUMAN | | | Keratin, type II | 0.11 | 0.01 | 51.80 | 3.01 |
| ITAVTVNQSL | LSPLVLEVDPNIQAVR | K2C8_HUMAN | | | Keratin, type II | 0.09 | 0.01 | 84.80 | 5.23 |
| YGGLTSPGLS | YSLGSSFGSGAGSSSFSR | K2C8_HUMAN | | | Keratin, type II | -0.04 | 0.00 | 103.20 | 3.55 |
| TSPGLSYSLG | SSFSGAGSSSFSR | K2C8_HUMAN | | | Keratin, type II cytoskeletal 8; | -0.19 | 0.01 | 80.90 | 0.30 |
| SPGLSYSLGS | SFGSGAGSSSFSR | K2C8_HUMAN | | | Keratin, type II cytoskeletal 8; | -0.46 | 0.04 | 39.80 | -3.94 |
| VNQSLLSPLV | LEVDPNIQAVR | K2C8_HUMAN | | | Keratin, type II cytoskeletal 8; | -0.49 | 0.06 | 37.00 | 4.03 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|------------------------|-------------|-------------|------------|---|---------------------------------|-----------------------|----------------------|-------|
| PGLSYSLGSS | FGSGAGSSSF | K2C8_HUMAN | | | Keratin, type II cytoskeletal 8; | -0.58 | 0.06 | 29.20 | 1.61 |
| VTVNQSLSP | LVLEVDPNQAVR | K2C8_HUMAN | | | Keratin, type II | -0.58 | 0.05 | 48.60 | 10.13 |
| FLEQQNKMLE | TKWSLLQQQTAR | K2C8_HUMAN | | | Keratin, type II cytoskeletal 8; | -0.65 | 0.05 | 26.10 | 2.60 |
| QSLLSPLVLE | VDPNIQAVR | K2C8_HUMAN | | | Keratin, type II cytoskeletal 8; | -1.00 | 0.10 | 30.90 | 1.82 |
| TVNQSLSP | VLEVDPNQAVR | K2C8_HUMAN | | | Keratin, type II | -1.00 | 0.10 | 47.50 | 6.08 |
| GGLTSPGLSY | SLGSSFGSGAGSSSF | K2C8_HUMAN | | | Keratin, type II | -1.14 | 0.08 | 89.00 | 4.98 |
| AARMSRSSGR | SGSMDPSGAHPSVR | KHDR1_HUMAN | | | KH domain-containing, | -1.40 | 0.07 | 28.80 | 2.89 |
| RQNEELNLLK | AQLNETLTKLR | KTN1_HUMAN | | | Kinectin; | 0.20 | 0.02 | 20.60 | 2.43 |
| SCYLKQGKFK | QAETLYKEILTR | KLC1_HUMAN | | | Kinesin light chain 1; | 2.54 | 0.15 | 30.60 | 1.38 |
| KILDTSVAYV | RGEENLAGWRPR | KIF1A_HUMAN | KIF1B_HUMAN | | Kinesin-like protein KIF1A; | 4.32 | 0.41 | 27.50 | 9.72 |
| WKISGLPVTR | VIGSGCNLDSAR | LDH6A_HUMAN | LDHA_HUMAN | LDHB_HUMAN | L-lactate dehydrogenase | 4.66 | 0.41 | 55.50 | -1.33 |
| IGPSKERTLS | ADASVNTLPVVVSR | LAR4B_HUMAN | | | La-related protein 4B; | 0.40 | 0.04 | 55.10 | 5.95 |
| LLCAPSLLVA | LDICKNPNCHNGGLCEEISQEV | MFGM_HUMAN | | | Lactadherin; | 2.32 | 0.15 | 55.30 | 3.66 |
| VRGRELTGLK | ALYETELADAR | LMNB1_HUMAN | | | Lamin-B1; | -0.04 | 0.00 | 46.30 | 5.36 |
| VIESTPIAE | TIMASSNESLVVNR | LAP2B_HUMAN | | | Lamina-associated polypeptide 2, isoforms | 2.06 | 0.15 | 67.80 | -0.26 |
| NRVTGNFKHA | SPILPITEFSDIPR | LAP2B_HUMAN | | | Lamina-associated polypeptide 2, isoforms | 1.08 | 0.08 | 54.90 | 7.62 |
| VNRVTGNFKH | ASPILPITEFSDIPR | LAP2B_HUMAN | | | Lamina-associated polypeptide 2, isoforms | 0.66 | 0.07 | 35.40 | 1.42 |
| VAYVLIKFAN | SPRPDLWVLER | LAMA3_HUMAN | LAMA5_HUMAN | | Laminin subunit alpha-3; | 1.55 | 0.06 | 24.30 | 3.93 |
| ERLLWEMRAR | DLGAPQAAAEELAAAQR | LAMA5_HUMAN | | | Laminin subunit alpha-5; | 5.54 | 0.67 | 58.60 | 1.63 |
| VVEYANEDAR | QEVGVAVHTPQR | LAMA5_HUMAN | | | Laminin subunit alpha-5; | 4.41 | 0.28 | 26.30 | 2.59 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|-------------------------|-------------|------|------|---|---------------------------------|-----------------------|----------------------|-------|
| SMHVLPRSSR | GLLLFTAR | LAMA5_HUMAN | | | Laminin subunit alpha-5; | 2.59 | 0.31 | 30.90 | -1.30 |
| GLALLGAARA | REEAGGGFSLHPPYFNLAEGAR | LAMA5_HUMAN | | | Laminin subunit alpha-5; | 1.51 | 0.01 | 48.80 | 3.45 |
| FGKTWRVYQY | LAADCTSTFPR | LAMB3_HUMAN | | | Laminin subunit beta-3; | -6.06 | 0.00 | 11.80 | 9.11 |
| FLPNTEGFSR | AALPFGLVR | LPHN2_HUMAN | | | Latrophilin-2; | 1.90 | 0.08 | 30.10 | 2.45 |
| DVYQGVPKDY | TGEDVTPQNFLAVLR | LGMN_HUMAN | | | Legumain; | 1.33 | 0.18 | 50.40 | 4.26 |
| LKSTGDGTLG | RASEVEVKNEIVANVGKR | LRRF1_HUMAN | | | Leucine-rich repeat flightless-interacting protein 1; | 0.09 | 0.01 | 31.60 | 6.85 |
| KGSRNMPGLS | AATLASLGGTSSR | LRRF1_HUMAN | | | Leucine-rich repeat flightless-interacting protein 1; | -0.40 | 0.04 | 63.20 | 1.23 |
| YLRSCRAHSV | VPISCFLR | YV012_HUMAN | | | Leucine-rich repeat- | 2.18 | 0.15 | 32.20 | -5.88 |
| VKPKTLPLDK | SINHQIESPSER | LIMC1_HUMAN | | | LIM and calponin | -1.14 | 0.05 | 27.10 | 3.77 |
| QPVAQSYGGY | KEPAAPVSIQR | LASP1_HUMAN | | | LIM and SH3 domain | 0.79 | 0.07 | 29.70 | 3.79 |
| MVADTPENLR | LKQQSELQSQVR | LASP1_HUMAN | | | LIM and SH3 domain | 0.45 | 0.04 | 29.70 | 7.59 |
| SAPVYQQPQQ | QPVAQSYGGYKEPAAPVSIQR | LASP1_HUMAN | | | LIM and SH3 domain protein 1; | 0.35 | 0.03 | 21.10 | 1.51 |
| QQPQQPVAQ | SYGGYKEPAAPVSIQR | LASP1_HUMAN | | | LIM and SH3 domain protein 1; | 0.22 | 0.02 | 30.40 | 3.63 |
| PQQQPVAQSY | GGYKEPAAPVSIQR | LASP1_HUMAN | | | LIM and SH3 domain protein 1; | 0.00 | 0.00 | 32.30 | 0.84 |
| LCGCPAAAA | SPLLLFANR | LRP5_HUMAN | | | Low-density lipoprotein receptor-related protein 5; | 1.34 | 0.06 | 43.30 | 1.13 |
| LLQLQHAAAA | AADPLLGGQGPAKDCEKDQFQCR | LRP8_HUMAN | | | Low-density lipoprotein | 0.17 | 0.01 | 32.40 | 0.15 |
| LLLQLQHAAA | AAADPLLGGQGPAKDCEKDQFQC | LRP8_HUMAN | | | Low-density lipoprotein receptor-related protein 8; | 0.02 | 0.00 | 35.90 | 2.37 |
| M | DGLQASAGPLR | NO66_HUMAN | | | Lysine-specific demethylase NO66; | 3.80 | 0.15 | 21.90 | 0.45 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|--------------------------|-------------|------|------|---|---------------------------------|-----------------------|----------------------|-------|
| SLATAALLGH | ILLHDFLLVPR | LYAG_HUMAN | | | Lysosomal alpha-glucosidase; | 1.69 | 0.03 | 44.50 | 4.15 |
| ATAALLGHIL | LHDFLLVPR | LYAG_HUMAN | | | Lysosomal alpha-glucosidase; | 1.43 | 0.07 | 26.00 | -0.09 |
| TAALLGHILL | HDFLLVPR | LYAG_HUMAN | | | Lysosomal alpha- | 1.22 | 0.06 | 29.90 | 6.69 |
| LLHDFLLVPR | ELSGSSPVLEETHPAHQGASRPGI | LYAG_HUMAN | | | Lysosomal alpha- | 0.48 | 0.02 | 44.90 | 1.41 |
| APQPIPRRSW | SPALTIENEHIR | MA2B1_HUMAN | | | Lysosomal alpha-mannosidase; | -0.24 | 0.02 | 29.70 | 0.71 |
| PTPHQTPYQL | DPANITLEPMEIR | MA2B1_HUMAN | | | Lysosomal alpha- | -0.88 | 0.05 | 40.30 | 3.85 |
| VPSHFRYEKD | TVVVQDLGNIFTR | PPGB_HUMAN | | | Lysosomal protective protein; | 1.50 | 0.17 | 67.50 | 4.36 |
| SPDGPSRFRK | AYKPEQPLVR | LOXL2_HUMAN | | | Lysyl oxidase homolog 2; | -0.46 | 0.03 | 25.20 | 0.31 |
| VCLLASRSIT | EEVSEYCSHMIGSGHLQSLQR | CSF1_HUMAN | | | Macrophage colony-stimulating factor 1; | 1.31 | 0.11 | 41.50 | 1.86 |
| IGKIGGAQNR | SYSKLLCGLLAER | MIF_HUMAN | | | Macrophage migration inhibitory factor; | 2.58 | 0.05 | 42.00 | 3.19 |
| MAFGGSSEPC | ALCSLHSIGKIGGAQNR | MIF_HUMAN | | | Macrophage migration inhibitory factor; | 0.67 | 0.03 | 30.40 | 4.75 |
| VPDQLMAFGG | SSEPCALCSLHSIGKIGGAQNR | MIF_HUMAN | | | Macrophage migration inhibitory factor; | -0.02 | 0.00 | 34.60 | 0.08 |
| KIGGAQNRSY | SKLLCGLLAER | MIF_HUMAN | | | Macrophage migration inhibitory factor; | -0.19 | 0.01 | 37.00 | -1.88 |
| GGSEPCALC | SLHSIGKIGGAQNR | MIF_HUMAN | | | Macrophage migration | -0.49 | 0.04 | 23.80 | 4.28 |
| YMLGSAMSRP | IIHFGSDYEDR | PRIO_HUMAN | | | Major prion protein; | -0.72 | 0.06 | 48.00 | 6.56 |
| DPLADRGEKD | TAKSLQPLAPR | MVP_HUMAN | | | Major vault protein; | 0.71 | 0.04 | 28.40 | 3.36 |
| QPSRHMSTMR | SAQILASALAEMQR | MMP15_HUMAN | | | Matrix metalloproteinase-15; | 1.36 | 0.09 | 30.60 | 3.61 |
| PPPLPRLKRR | DFTPAELR | PGRC1_HUMAN | | | Membrane-associated progesterone receptor | 1.31 | 0.07 | 29.60 | 4.88 |
| GSLLEADVR | ALGGLACDLPGR | MSLN_HUMAN | | | Mesothelin; | 5.74 | 0.42 | 52.70 | -1.06 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|------------------------|-------------|------|------|--------------------------------|---------------------------------|-----------------------|----------------------|-------|
| WSVSTMDALR | GLLPVLGQPIIR | MSLN_HUMAN | | | Mesothelin; | 4.70 | 0.61 | 39.40 | 2.22 |
| AESAEVLLPR | LVSCPGPLDQDQQAAR | MSLN_HUMAN | | | Mesothelin; | 3.73 | 0.33 | 62.80 | 0.63 |
| PPNISSLSPR | QLLGFPCAIEVSGLSTER | MSLN_HUMAN | | | Mesothelin; | 2.92 | 0.30 | 71.00 | 3.01 |
| GGLACDLPGR | FVAESAEVLLPR | MSLN_HUMAN | | | Mesothelin; | 1.62 | 0.04 | 60.10 | 1.18 |
| CTRFFSRITK | ANVDLLPR | MSLN_HUMAN | | | Mesothelin; | 0.02 | 0.00 | 33.00 | 2.48 |
| QSRHLACLPR | EPGLCTWQSLR | TIMP1_HUMAN | | | Metalloproteinase inhibitor 1; | 2.86 | 0.15 | 35.70 | -0.07 |
| WLIAPSR | CVPPHPQTAFCSNDLVIR | TIMP1_HUMAN | | | Metalloproteinase | 1.44 | 0.14 | 46.80 | 3.36 |
| QDGLLHITTC | SFVAPWNSLSLAQR | TIMP1_HUMAN | | | Metalloproteinase | 1.38 | 0.09 | 66.70 | 5.86 |
| GDAADIRFVY | TPAMESVCGYFHR | TIMP1_HUMAN | | | Metalloproteinase inhibitor 1; | 1.33 | 0.07 | 34.10 | 0.57 |
| LLWLIAPSRA | CTCVPPHPQTAFCSNDLVIR | TIMP1_HUMAN | | | Metalloproteinase inhibitor 1; | 1.18 | 0.02 | 71.30 | 3.83 |
| ACTCVPPHPQ | TAFCSNDLVIR | TIMP1_HUMAN | | | Metalloproteinase inhibitor 1; | 0.93 | 0.07 | 54.90 | 1.13 |
| AFCNADVIR | AKAVSEKEVDSGNDIYGNPIKR | TIMP2_HUMAN | | | Metalloproteinase inhibitor 2; | 5.59 | 0.61 | 58.40 | 4.55 |
| AKAVSEKEVD | SGNDIYGNPIKR | TIMP2_HUMAN | | | Metalloproteinase inhibitor 2; | 1.56 | 0.10 | 32.70 | 0.86 |
| LLRPADACSC | SPVHPQQAFCNADVIR | TIMP2_HUMAN | | | Metalloproteinase | 1.33 | 0.09 | 79.80 | 2.79 |
| LATLLRPADA | CSCSPVHPQQAFCNADVIR | TIMP2_HUMAN | | | Metalloproteinase inhibitor 2; | 1.10 | 0.01 | 72.90 | 2.57 |
| ATLLRPADAC | SCSPVHPQQAFCNADVIR | TIMP2_HUMAN | | | Metalloproteinase | 0.90 | 0.08 | 47.30 | 2.57 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|--------------------------|--------------|------------|------|--|---------------------------------|-----------------------|----------------------|-------|
| KLDGEKAVLE | NNLGAAVLR | MAT2B_HUMAN | | | Methionine adenosyltransferase 2 subunit beta; | 1.75 | 0.08 | 33.10 | 8.47 |
| MSP | ALQDLSQPEGLKKTLR | METH_HUMAN | | | Methionine synthase; | 2.26 | 0.24 | 32.20 | 5.04 |
| MRK | ETPPPLVPPAAR | MEP50_HUMAN | | | Methylosome protein 50; | 1.46 | 0.12 | 31.00 | 6.12 |
| M | RKETPPPLVPPAAR | MEP50_HUMAN | | | Methylosome protein 50; | 0.91 | 0.05 | 39.30 | 5.82 |
| FALGPVSGPQ | AFPKLVR | C2TA_HUMAN | | | MHC class II | 10.56 | 0.00 | 15.90 | 9.24 |
| LPLRGPRARR | SASPHDVDLCLVSPCEFEHR | MAP1S_HUMAN | | | Microtubule-associated protein 1S; | -0.02 | 0.00 | 52.70 | 4.47 |
| MAVNVY | STSVTSDNLSR | MARE1_HUMAN | | | Microtubule-associated protein RP/EB family | -0.34 | 0.02 | 32.00 | 3.91 |
| ELMQQVNVLK | LTVEDLEKER | MARE1_HUMAN | | | Microtubule-associated | -0.46 | 0.04 | 22.60 | 3.07 |
| MAP | KFPDSVEELR | TOM34_HUMAN | | | Mitochondrial import | 3.78 | 0.29 | 23.00 | -1.63 |
| M | APKFPDSVEELR | TOM34_HUMAN | | | Mitochondrial import | -1.80 | 0.06 | 26.10 | 4.15 |
| SKPVEAAVVA | AAVPSSGSGVGGGGTAGPGTGGLF | TOM70_HUMAN | | | Mitochondrial import receptor subunit TOM70; | 0.24 | 0.02 | 40.80 | 5.89 |
| EESLKTDPHE | IGEGKPTPALSEEASSSSIR | IMMT_HUMAN | | | Mitochondrial inner membrane protein; | -1.29 | 0.10 | 62.60 | 5.40 |
| M | VGGGGVGGGLENANPLIYQR | MIP18_HUMAN | | | Mitotic spindle-associated | 1.04 | 0.07 | 73.10 | 3.33 |
| DMKLVWPSAK | LLQAAAGASAR | MMS19_HUMAN | | | MMS19 nucleotide excision repair protein | 1.62 | 0.07 | 33.00 | 2.65 |
| YGDFNKEVHK | SGYLAGDKLLPQR | MOES_HUMAN | | | Moesin; | 2.18 | 0.13 | 28.10 | 7.45 |
| KEVYELLDSP | GKVLLQSKDQITAGNAAR | PUR6_HUMAN | | | Multifunctional protein ADE2; | -0.76 | 0.06 | 42.90 | 0.46 |
| SVPAPPRQFR | ELPDSVPQECTVR | MYOF_HUMAN | | | Myoferlin; | 0.48 | 0.03 | 37.20 | 0.96 |
| FTEDQTAEFK | EAFQLFDR | MYL6_HUMAN | | | Myosin light polypeptide | -0.76 | 0.05 | 36.30 | 1.04 |
| MERELEKSQR | SQISSVNSDVEALRR | MPRIIP_HUMAN | | | Myosin phosphatase Rho-interacting protein; | 0.30 | 0.03 | 33.20 | 3.54 |
| RCIIPNHEKK | AGKLDPHLVLDQLR | MYH10_HUMAN | MYH9_HUMAN | | Myosin-10; | 0.43 | 0.02 | 36.80 | 4.96 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|-------------|-------------------------|-------------|------|------|---|---------------------------------|-----------------------|----------------------|-------|
| VRCIIPNEK | KAGKLDPHLVLDQLR | MYH9_HUMAN | | | Myosin-9; | 0.51 | 0.03 | 30.70 | 7.02 |
| EVSSLKNKLR | RGDLPFVVPR | MYH9_HUMAN | | | Myosin-9; | -0.02 | 0.00 | 34.70 | 2.19 |
| EAEELRARLT | AKKQELEEICHDLER | MYH9_HUMAN | | | Myosin-9; | -0.62 | 0.03 | 36.80 | 2.33 |
| GWDRTAQLTS | LAMLMLDSFYR | MTM1_HUMAN | | | Myotubularin; | 8.88 | 1.12 | 32.60 | 5.25 |
| GGPAPAGAAK | MKVVEEPNAFGVNNPFLPQASR | GNPTG_HUMAN | | | N-acetylglucosamine-1- | 1.71 | 0.05 | 66.70 | 7.03 |
| SAGGPAPAGA | AKMKVVEEPNAFGVNNPFLPQAS | GNPTG_HUMAN | | | N-acetylglucosamine-1-phosphotransferase | 1.56 | 0.01 | 59.00 | 2.64 |
| PAPAGAAKMK | VVEEPNAFGVNNPFLPQASR | GNPTG_HUMAN | | | N-acetylglucosamine-1-phosphotransferase | 0.74 | 0.02 | 50.40 | 2.80 |
| KHKKEVGKLK | SMDLSEYIIR | NAT10_HUMAN | | | N-acetyltransferase 10; | 0.02 | 0.00 | 48.20 | 0.64 |
| M | TSALENYINR | NAA38_HUMAN | | | N-alpha-acetyltransferase 38, NatC auxiliary Na(+)/H(+) exchange regulatory cofactor NHE-RF1; | 2.85 | 0.14 | 25.20 | 5.59 |
| EKGKLGQYIR | LVEPGSPAEEKAGLLAGDR | NHRF1_HUMAN | | | Na(+)/H(+) exchange NACHT, LRR and PYD domains-containing NAD(P)H dehydrogenase [quinone] 1; | 1.31 | 0.07 | 39.50 | 1.90 |
| IQKENSREAL | AEAALESPPALVR | NHRF1_HUMAN | | | NADH dehydrogenase | 0.54 | 0.03 | 26.40 | -1.52 |
| EKELEQLELR | GSKVQTLFLSK | NALP6_HUMAN | | | NADH-cytochrome b5 | 4.75 | 0.80 | 24.70 | 7.42 |
| MVGRR | ALIVLAHSER | NQO1_HUMAN | | | Nascent polypeptide-associated complex | -0.02 | 0.00 | 32.80 | 3.23 |
| WYRQHPQPYI | FPDSPGGTSYER | NDUB9_HUMAN | | | Nascent polypeptide-associated complex subunit alpha; | 2.21 | 0.21 | 24.60 | 0.67 |
| LMKLFQRSTP | AITLESPDIKYPLR | NB5R3_HUMAN | | | Nascent polypeptide-associated complex | 1.13 | 0.05 | 30.70 | 0.84 |
| QDSTQATTQQ | AQLAAAAEIDEEPVS KAKQSR | NACA_HUMAN | | | NEDD8-activating enzyme E1 regulatory | 1.03 | 0.09 | 57.10 | 1.73 |
| TQATTQQAQL | AAAAEIDEEPVS KAKQSR | NACA_HUMAN | | | Nestin; | 0.63 | 0.08 | 48.70 | 1.60 |
| STQATTQQAQ | LAAAAEIDEEPVS KAKQSR | NACA_HUMAN | | | Nestin; | 0.51 | 0.03 | 26.40 | 3.00 |
| IKNVNTALNT | TQIPSSIEDIFNDDR | ULA1_HUMAN | | | | -1.34 | 0.17 | 29.90 | -1.90 |
| LEKETLKS LG | EIQESLKTLENQSHETLER | NEST_HUMAN | | | | 0.92 | 0.08 | 30.80 | 3.62 |
| AKRVQGLEGP | RKDL EEAGGLGTEFSELPGKSR | NEST_HUMAN | | | | 0.91 | 0.05 | 69.10 | -0.81 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|-------------------------|-------------|------------|------|--|---------------------------------|-----------------------|----------------------|-------|
| GEFLESDSVS | VSVPWDDSLR | NEST_HUMAN | | | Nestin; | 0.60 | 0.04 | 44.30 | 1.41 |
| GVLFCRPDQ | TADMHIINGEDMGPSAR | NEUL2_HUMAN | | | Neuralized-like protein 2; | 2.52 | 0.09 | 32.50 | -3.17 |
| WVQREISNFE | YLMQLNTIAGR | NBEL2_HUMAN | | | Neurobeachin-like protein 2; | -5.06 | 0.00 | 28.40 | 7.99 |
| FALLAAGVAP | LSWDLPEPR | NMB_HUMAN | | | Neuromedin-B; | 1.19 | 0.07 | 36.20 | 4.03 |
| RVSQGLNGDL | YFSNVLPEDTR | NRCAM_HUMAN | | | Neuronal cell adhesion molecule; | -6.06 | 0.00 | 26.10 | 3.42 |
| ESGPERVWR | ASWGEFQAR | VEGF_HUMAN | | | Neurosecretory protein VGF; | 2.22 | 0.13 | 29.60 | 2.85 |
| IDELEPRRPR | YRVPDVLVADPPIAR | GANAB_HUMAN | | | Neutral alpha-glucosidase AB; | 0.60 | 0.01 | 37.00 | 3.16 |
| FEYAYMRWK | ALIEMEKQQQDQVDR | NONO_HUMAN | | | Non-POU domain-containing octamer-binding protein; | 1.13 | 0.10 | 42.40 | 1.22 |
| AFSQFGPIER | AVVIVDDR | NONO_HUMAN | SFPQ_HUMAN | | Non-POU domain-containing octamer-binding protein; | 0.78 | 0.06 | 30.60 | 0.22 |
| VLSTSSPAQQ | AENEAKASSILIDSEPTTNIQIR | NSF1C_HUMAN | | | NSFL1 cofactor p47; | -0.52 | 0.04 | 67.90 | 3.41 |
| LKATLVESST | SGFTPGGGGSSVSMIASR | NASP_HUMAN | | | Nuclear autoantigenic sperm protein; | 0.17 | 0.01 | 97.70 | 1.19 |
| ELALKATLVE | SSTSGFTPGGGGSSVSMIASR | NASP_HUMAN | | | Nuclear autoantigenic sperm protein; | 0.00 | 0.00 | 89.80 | 1.78 |
| IPARSQAPLE | SSLDSLGDVFLDSGR | NUMA1_HUMAN | | | Nuclear mitotic apparatus protein 1; | 1.41 | 0.12 | 59.10 | 8.20 |
| LRRASMQPIQ | IAEGTGITTR | NUMA1_HUMAN | | | Nuclear mitotic apparatus protein 1; | -0.43 | 0.04 | 23.30 | 5.32 |
| RYMTQFADQN | FSDFLFR | NU133_HUMAN | | | Nuclear pore complex | 2.41 | 0.09 | 22.50 | 0.00 |
| TSVPPGFKVF | GAPNVVEDEIDQYLSKQDGKIYR | NPL4_HUMAN | | | Nuclear protein | -0.52 | 0.02 | 38.60 | 3.49 |
| VSDSHFQRVS | AAVLPLVHPLPEGLR | NCOR1_HUMAN | | | Nuclear receptor corepressor 1; | -0.19 | 0.01 | 41.80 | 0.87 |
| GETVEFDVVE | GEKGAEANVTGPGGVPVQGSKY | YBOX1_HUMAN | | | Nuclease-sensitive element-binding protein 1; | -0.69 | 0.04 | 46.00 | 4.38 |
| SQGRLEAQKR | ELQQAVLHMEQR | NUCB1_HUMAN | | | Nucleobindin-1; | 0.33 | 0.02 | 42.70 | 0.13 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|-----------------------|-------------|------------|------------|---|---------------------------------|-----------------------|----------------------|-------|
| MVATTKPKAT | AKAALSLPAKQAPQGSR | NOLC1_HUMAN | | | Nucleolar and coiled-body phosphoprotein 1; | 0.61 | 0.03 | 27.00 | 4.00 |
| QKSTWKKKVK | SLPNILTDDR | NOL10_HUMAN | | | Nucleolar protein 10; | 1.12 | 0.05 | 30.90 | 4.26 |
| RKPYVLNDLE | AEASLPEKKGNTLSR | NOP16_HUMAN | | | Nucleolar protein 16; | -0.16 | 0.01 | 26.80 | 3.46 |
| EEKGAVEALA | AALAHISGATSVDQR | DDX21_HUMAN | | | Nucleolar RNA helicase 2; | 0.38 | 0.03 | 52.90 | -0.65 |
| ARSQPSKTLF | VKGLSEDTEETLKESFDGSVR | NUCL_HUMAN | | | Nucleolin; | 1.13 | 0.07 | 35.00 | 3.54 |
| KNLPYKVTQD | ELKEVFEDAAEIR | NUCL_HUMAN | | | Nucleolin; | 0.26 | 0.01 | 38.80 | 0.68 |
| NFNKSAPELK | TGISDVFAKNDLAVVDVR | NUCL_HUMAN | | | Nucleolin; | -0.19 | 0.01 | 54.70 | 3.09 |
| NLPYKVTQDE | LKEVFEDAAEIR | NUCL_HUMAN | | | Nucleolin; | -0.37 | 0.02 | 43.90 | -0.13 |
| TLLAKNLPYK | VTQDELKEVFEDAAEIR | NUCL_HUMAN | | | Nucleolin; | -0.37 | 0.04 | 43.40 | 2.00 |
| FNKSAPELKT | GISDVFAKNDLAVVDVR | NUCL_HUMAN | | | Nucleolin; | -1.29 | 0.10 | 51.50 | 7.20 |
| MSVQPTVSLG | GFEITPPVVLRL | NPM_HUMAN | | | Nucleophosmin; | 1.14 | 0.04 | 30.80 | 4.22 |
| M | AICQFFLQGR | NUPL2_HUMAN | | | Nucleoporin-like protein 2; | 0.87 | 0.04 | 44.10 | -5.26 |
| ERPSTSTAVF | GTVSATPSSSLPKR | TPR_HUMAN | | | Nucleoprotein TPR; | 1.26 | 0.11 | 24.60 | 5.95 |
| EGLNVVKTGR | VMLGETNPADSKPGTIR | NDKA_HUMAN | NDK8_HUMAN | NDKB_HUMAN | Nucleoside diphosphate kinase A; | 4.00 | 0.41 | 29.50 | -2.60 |
| QNPQILAALQ | ERLDGLVETPTGYIESLPR | NP1L1_HUMAN | | | Nucleosome assembly protein 1-like 1; | 2.41 | 0.15 | 57.30 | 0.69 |
| ARQLTVQMMQ | NPQILAALQER | NP1L1_HUMAN | | | Nucleosome assembly protein 1-like 1; | 1.95 | 0.16 | 47.70 | 0.62 |
| ALQERLDGLV | ETPTGYIESLPR | NP1L1_HUMAN | | | Nucleosome assembly protein 1-like 1; | 1.61 | 0.08 | 40.10 | 5.25 |
| LKARQLTVQM | MQNPQILAALQER | NP1L1_HUMAN | | | Nucleosome assembly protein 1-like 1; | 1.53 | 0.10 | 68.90 | 4.27 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|-------------|--------------------------|-------------|------------|------|--|---------------------------------|-----------------------|----------------------|------|
| KARQLTVQMM | QNPQILAALQER | NP1L1_HUMAN | | | Nucleosome assembly | 1.41 | 0.11 | 51.50 | 9.58 |
| YEEVHDLERK | YAVLYQPLFDKR | NP1L1_HUMAN | | | Nucleosome assembly | 1.01 | 0.05 | 28.70 | 1.90 |
| ILAALQERLD | GLVETPTGYIESLPR | NP1L1_HUMAN | | | Nucleosome assembly protein 1-like 1; | -0.49 | 0.03 | 81.40 | 3.48 |
| RTRSSTCGPP | AFLGVFGR | MACD1_HUMAN | | | O-acetyl-ADP-ribose | 4.71 | 0.17 | 20.80 | 5.58 |
| LLLSGRPTRA | DSKVFGDLDQVR | OLM2A_HUMAN | | | Olfactomedin-like protein 2A; | 2.19 | 0.16 | 40.90 | 1.18 |
| RGVHSSVASA | TSVATKKTQVGPPTSDDIFER | OAT_HUMAN | | | Ornithine aminotransferase, | 0.94 | 0.07 | 40.50 | 2.35 |
| VDSEWGFYR | SGQAKETIPLQETSPLYTQDR | PPT1_HUMAN | | | Palmitoyl-protein | 0.20 | 0.02 | 77.30 | 3.55 |
| SMPQDFRPVS | SIIDVDILPETHR | PAR6B_HUMAN | | | Partitioning defective 6 homolog beta; | -0.52 | 0.02 | 35.20 | 1.55 |
| YSGSVAPANS | ALGQTQPSDQDTLVQR | PDL15_HUMAN | | | PDZ and LIM domain protein 5; | 0.13 | 0.01 | 50.70 | 2.12 |
| TYSGSVAPAN | SALGQTQPSDQDTLVQR | PDL15_HUMAN | | | PDZ and LIM domain | -0.04 | 0.00 | 30.90 | 1.97 |
| RISNSATYSG | SVAPANSALGQTQPSDQDTLVQR | PDL15_HUMAN | | | PDZ and LIM domain protein 5; | -0.19 | 0.02 | 62.90 | 5.83 |
| TGRISNSATY | SGSVAPANSALGQTQPSDQDTLVQ | PDL15_HUMAN | | | PDZ and LIM domain protein 5; | -0.43 | 0.04 | 71.20 | 3.39 |
| CAPGAPAEAR | LTSALDELLQATR | PTX3_HUMAN | | | Pentraxin-related protein PTX3; | 4.13 | 0.58 | 59.80 | 5.48 |
| APGAPAEARL | TSALDELLQATR | PTX3_HUMAN | | | Pentraxin-related protein PTX3; | 3.72 | 0.28 | 61.90 | 8.09 |
| MLENSQMRER | MLLQATDDVLR | PTX3_HUMAN | | | Pentraxin-related protein PTX3; | 2.48 | 0.19 | 41.70 | 5.91 |
| LQRLREELGR | LAESLARPCAPGAPAEAR | PTX3_HUMAN | | | Pentraxin-related protein | 2.22 | 0.10 | 34.50 | 3.16 |
| LLVFPSSCLA | FRSPLSVFKR | AMD_HUMAN | | | Peptidyl-glycine alpha- | 1.26 | 0.03 | 31.80 | 3.17 |
| FGYKGSFCFHR | IIPGFMCQGGDFTR | PAL4A_HUMAN | PPIA_HUMAN | | Peptidyl-prolyl cis-trans isomerase A-like 4A/B/C; | 2.88 | 0.19 | 33.50 | 3.69 |
| AVDGEPLGRV | SFELFADKVPKTAENFR | PPIA_HUMAN | | | Peptidyl-prolyl cis-trans isomerase A; | 0.24 | 0.00 | 30.30 | 1.76 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|-------------|----------------------|-------------|-------------|------|---|---------------------------------|-----------------------|----------------------|-------|
| LDGKHVVFVK | VKEGMNIVEAMER | PPIA_HUMAN | | | Peptidyl-prolyl cis-trans isomerase A; | -0.55 | 0.02 | 24.40 | 4.28 |
| M | GVQVETISPGDGR | FKB1A_HUMAN | | | Peptidyl-prolyl cis-trans isomerase FKBP1A; | -0.16 | 0.01 | 60.20 | -0.97 |
| DSNNEKGLFR | RGEAHLAVNDFELAR | FKBP4_HUMAN | | | Peptidyl-prolyl cis-trans isomerase FKBP9; | 0.42 | 0.05 | 52.10 | 0.64 |
| VTGQAAPVAG | LGSDAELQIER | FKBP9_HUMAN | | | Peptidyl-prolyl cis-trans isomerase-like 2; | 1.22 | 0.09 | 35.40 | 5.61 |
| TGKVSASFTS | TAMVPETTHEAAAIDEDVLR | PPIL2_HUMAN | | | Perilipin-3; | -0.72 | 0.06 | 61.90 | 4.26 |
| MSADGAEAD | GSTQVTVEEPVQQPSVVDR | PLIN3_HUMAN | | | Perilipin-4; | 0.00 | 0.00 | 60.00 | 4.73 |
| VSSGVASVVD | VAKGVVQGGLDTTR | PLIN4_HUMAN | | | Peroxioredoxin-1; | 0.72 | 0.08 | 44.30 | 1.85 |
| FIIDGKGVLR | QITVNDLPVGR | PRDX1_HUMAN | PRDX2_HUMAN | | Peroxioredoxin-1; | 5.10 | 0.50 | 32.70 | 3.39 |
| NIPLVSDPKR | TIAQDYGVKKADEGISFR | PRDX1_HUMAN | | | Peroxioredoxin-1; | 0.87 | 0.07 | 37.30 | 4.85 |
| YLED SGHTLR | GLFIIDDKGILR | PRDX1_HUMAN | PRDX4_HUMAN | | Peroxioredoxin-1; | 0.68 | 0.06 | 30.80 | 2.17 |
| VSDPKRTIAQ | DYGVKKADEGISFR | PRDX1_HUMAN | | | Peroxioredoxin-1; | 0.63 | 0.02 | 31.20 | 2.38 |
| HLAWVNTPKK | QGGLGPMNIPLVSDPKR | PRDX1_HUMAN | | | Peroxioredoxin-1; | 0.20 | 0.01 | 42.20 | 3.30 |
| CHLAWVNTPK | KQGGLGPMNIPLVSDPKR | PRDX1_HUMAN | | | Peroxioredoxin-1; | 0.00 | 0.00 | 39.50 | 2.34 |
| VVFFFYPLDF | TFVCPTEIIAFSDR | PRDX1_HUMAN | | | Peroxioredoxin-1; | -0.32 | 0.02 | 50.70 | 0.59 |
| EDSGHTLRGL | FIIDDKGILR | PRDX1_HUMAN | PRDX4_HUMAN | | Peroxioredoxin-1; | -5.06 | 1.69 | 23.20 | 2.30 |
| FIIDDKGILR | QITLNDLPVGR | PRDX4_HUMAN | | | Peroxioredoxin-4; | 8.40 | 1.63 | 29.40 | 4.06 |
| MPGGLLLG | DVAPNFEANTTVGR | PRDX6_HUMAN | | | Peroxioredoxin-6; | 1.26 | 0.11 | 63.40 | 8.55 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|----------------------|-------------|------------|------|--|---------------------------------|-----------------------|----------------------|-------|
| KKKVEKGVLN | VHPAASASKPSADQIR | PHF3_HUMAN | | | PHD finger protein 3; | 0.78 | 0.04 | 30.30 | 2.05 |
| MPTVSVKR | DLLFQALGR | SYFB_HUMAN | | | Phenylalanine--tRNA | 1.25 | 0.09 | 44.30 | 3.86 |
| MAERGGAGG | GPGGAGGGSGQR | PACS1_HUMAN | | | Phosphofurin acidic cluster sorting protein 1; | 3.06 | 0.24 | 22.70 | 0.61 |
| FTDGSRIVFR | LSGTGSAGATIR | PGM1_HUMAN | | | Phosphoglucomutase-1; | 1.90 | 0.11 | 36.00 | 5.00 |
| AEPDKIEAFR | ASLSKLGDVYVNDAFGTAHR | PGK1_HUMAN | PGK2_HUMAN | | Phosphoglycerate kinase 1; | 0.50 | 0.03 | 46.90 | 3.58 |
| EKACANPAPG | SVILLENLR | PGK1_HUMAN | PGK2_HUMAN | | Phosphoglycerate kinase 1; | -0.26 | 0.01 | 40.70 | 2.11 |
| IEAFRASLSK | LGDVYVNDAFGTAHR | PGK1_HUMAN | PGK2_HUMAN | | Phosphoglycerate kinase 1; | -0.80 | 0.04 | 53.70 | 2.39 |
| ISKDRRYADL | TEDQLPSCESLKDTIAR | PGAM1_HUMAN | | | Phosphoglycerate mutase 1; | 0.38 | 0.04 | 33.10 | 2.26 |
| GISVLEMSHR | SSDFAKIINNTENLVR | SERC_HUMAN | | | Phosphoserine | 2.28 | 0.10 | 49.20 | 3.62 |
| KVIFLQGGGC | GQFSAVPLNLIGLKAGR | SERC_HUMAN | | | Phosphoserine | 0.06 | 0.00 | 37.70 | 1.82 |
| VGSAGVTVVI | VRDDLGFALR | SERC_HUMAN | | | Phosphoserine aminotransferase; | -2.05 | 0.17 | 48.00 | 5.04 |
| LTGESDHVKK | SLDKDPLLLSGTHVMEGSGR | AT2B1_HUMAN | | | Plasma membrane Plasminogen activator | 0.86 | 0.05 | 35.40 | 1.52 |
| GGGVGGPGAK | SAAQAAAQTNNAAGKQLR | PAIRB_HUMAN | | | inhibitor 1 RNA-binding Plasminogen activator | 0.75 | 0.07 | 59.60 | 1.76 |
| MPG | HLQEGFGCVVTNR | PAIRB_HUMAN | | | inhibitor 1 RNA-binding protein; | -0.07 | 0.01 | 48.20 | 1.68 |
| LGLALVFEGE | SAVHHPPSYVAHLASDFGVR | PAI1_HUMAN | | | Plasminogen activator | 0.64 | 0.03 | 50.40 | -1.29 |
| KRPLPIRRKR | SIEEAVPAVCKTR | PDGFA_HUMAN | | | Platelet-derived growth factor subunit A; | 2.37 | 0.08 | 42.90 | 1.57 |
| KRPLPIRRKR | SIEEAVPAVCK | PDGFA_HUMAN | | | Platelet-derived growth | 2.18 | 0.23 | 26.80 | 1.35 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|-------------------------|-------------|------|------|---|---------------------------------|-----------------------|----------------------|-------|
| LCCYLRLVSA | EGDPIPEELYEMLSDHSIR | PDGFB_HUMAN | | | Platelet-derived growth factor subunit B; | -3.24 | 0.31 | 41.10 | 2.56 |
| SRSSSVGSSS | SYPISPAVSR | PLEC_HUMAN | | | Plectin; | 0.13 | 0.00 | 26.40 | 1.72 |
| EAAVDAQQK | RSIQEELQQLR | PLEC_HUMAN | | | Plectin; | 0.11 | 0.01 | 31.10 | 4.60 |
| LLPLSEKAAR | ARQEELYSELQAR | PLEC_HUMAN | | | Plectin; | 0.09 | 0.01 | 56.70 | 0.98 |
| LLQETQALQQ | SFLSEKDSLLQR | PLEC_HUMAN | | | Plectin; | 0.02 | 0.00 | 27.70 | 2.55 |
| CAQRIAEQK | AQAEVEGLGKGVAR | PLEC_HUMAN | | | Plectin; | -0.19 | 0.02 | 36.10 | -2.08 |
| RSRSSSVGSS | SSYPISPAVSR | PLEC_HUMAN | | | Plectin; | -0.76 | 0.05 | 33.70 | 5.53 |
| VAQVTLQSVQ | RRPELEDSTLR | PLEC_HUMAN | | | Plectin; | -0.83 | 0.03 | 24.20 | 0.92 |
| ILALKASFEK | AAAGKAELELELGR | PLEC_HUMAN | | | Plectin; | -0.96 | 0.06 | 25.90 | 1.80 |
| LPSDMAVALL | EAQAGTGHIDPATSAR | PLEC_HUMAN | | | Plectin; | -1.14 | 0.08 | 39.30 | 1.04 |
| PSDMAVALLE | AQAGTGHIDPATSAR | PLEC_HUMAN | | | Plectin; | -1.19 | 0.05 | 25.50 | 1.75 |
| LQQRCPDQL | TGLSLLPLSEKAAR | PLEC_HUMAN | | | Plectin; | -1.40 | 0.15 | 26.80 | 3.80 |
| ILSPWGAEVK | AEPVEVVAPR | PARP1_HUMAN | | | Poly [ADP-ribose] | -0.14 | 0.01 | 41.10 | 1.92 |
| LDAYSIQGQH | TISPLDLAKLNQVAR | PCBP1_HUMAN | | | Poly(rC)-binding protein 1; | 1.47 | 0.11 | 33.90 | 2.24 |
| PEVKGWGLD | ASAQTTSHELTIPNDLIGCIIGR | PCBP2_HUMAN | | | Poly(rC)-binding protein 2; | 0.72 | 0.06 | 66.10 | 1.64 |
| TNLQMAAVTM | GFGDPLSPLQSMQAQR | PUF60_HUMAN | | | Poly(U)-binding-splicing factor PUF60; | 0.24 | 0.01 | 89.20 | 1.70 |
| LTKVVQNDAY | TAPALPSSIR | PDIP3_HUMAN | | | Polymerase delta-interacting protein 3; | 0.92 | 0.08 | 33.70 | 1.24 |
| AFLWVLGIAY | YMYSGGGSALAGGAGGAGR | GALT2_HUMAN | | | Polypeptide N- | 0.98 | 0.10 | 123.50 | 3.44 |
| FAFLWVLGIA | YYMYSGGGSALAGGAGGAGR | GALT2_HUMAN | | | Polypeptide N-acetylgalactosaminyltrans | 0.98 | 0.06 | 128.70 | -0.10 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|---------------------------|-------------|------|------|---|---------------------------------|-----------------------|----------------------|-------|
| LWVLGIAYYM | YSGGGSALAGGAGGGAGR | GALT2_HUMAN | | | Polypeptide N-acetylgalactosaminyltransferase 2; | 0.91 | 0.08 | 84.00 | 5.83 |
| FLWVLGIAYY | MYSGGGSALAGGAGGGAGR | GALT2_HUMAN | | | Polypeptide N-acetylgalactosaminyltransferase 2; | 0.85 | 0.11 | 128.30 | 2.09 |
| LTVAYIFVEL | LVSTFHASAGAGR | GALT4_HUMAN | | | Polypeptide N-acetylgalactosaminyltransferase 4; | 1.31 | 0.13 | 35.70 | 1.53 |
| AASAAVDAG | MAMAGQSPVLR | PTBP1_HUMAN | | | Polypyrimidine tract-binding protein 1; | 1.72 | 0.11 | 47.00 | -1.00 |
| QTMAAAFGLS | VPNVHGALAPLAIPSAAAAAAAAAA | PTBP1_HUMAN | | | Polypyrimidine tract-binding protein 1; | 0.04 | 0.00 | 69.50 | 0.88 |
| PNVHGALAPL | AIPSAAAAAAAAAAGR | PTBP1_HUMAN | | | Polypyrimidine tract-binding protein 1; | -0.09 | 0.00 | 51.50 | 4.59 |
| AGRIAPGLA | GAGNSVLLVSNLNPER | PTBP1_HUMAN | | | Polypyrimidine tract-binding protein 1; | -0.52 | 0.03 | 63.00 | 4.24 |
| MD | GIVPDIAVGTKR | PTBP1_HUMAN | | | Polypyrimidine tract-binding protein 1; | -0.80 | 0.04 | 36.20 | 1.09 |
| AFGLSVPNVH | GALAPLAIPSAAAAAAAAAAGR | PTBP1_HUMAN | | | Polypyrimidine tract-binding protein 1; | -0.83 | 0.03 | 89.70 | 6.74 |
| MDG | IVPDIAVGTKR | PTBP1_HUMAN | | | Polypyrimidine tract-binding protein 1; | -0.96 | 0.06 | 21.30 | 1.13 |
| ALAASAAVD | AGMAMAGQSPVLR | PTBP1_HUMAN | | | Polypyrimidine tract-binding protein 1; | -1.04 | 0.07 | 59.60 | 2.64 |
| MRSEK | SLTLAAPGEVR | KCNA6_HUMAN | | | Potassium voltage-gated channel subfamily A member 6; | 6.26 | 0.83 | 27.10 | 3.33 |
| QTDVGITHFR | SGMSHEEDQLIPNLYR | PRP8_HUMAN | | | Pre-mRNA-processing-splicing factor 8; | 0.46 | 0.02 | 42.10 | -1.87 |
| KAPAPRPSLL | GLDLLASLKR | PRP16_HUMAN | | | Pre-mRNA-splicing factor ATP-dependent RNA | -0.96 | 0.09 | 30.30 | -4.41 |
| EDEEGQKVTI | HDKTEINLVSFR | CWC22_HUMAN | | | Pre-mRNA-splicing factor | 6.89 | 0.96 | 38.70 | -7.59 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|------------------------|-------------|------------|------|---|---------------------------------|-----------------------|----------------------|-------|
| MAENSGRAGK | SSGSGAGKGAVSAEQVIAGFNR | PFD2_HUMAN | | | Prefoldin subunit 2; | -0.09 | 0.01 | 69.80 | -2.37 |
| ALSTALSEKR | TLEGELHDLR | LMNA_HUMAN | | | Prelamin-A/C; | 2.68 | 0.25 | 29.20 | 6.18 |
| NTWGCNSLR | TALINSTGEEVAMR | LMNA_HUMAN | | | Prelamin-A/C; | 1.64 | 0.08 | 49.80 | 5.06 |
| LDNARQSAER | NSNLVGAAHEELQQSR | LMNA_HUMAN | | | Prelamin-A/C; | 1.47 | 0.10 | 42.40 | 2.75 |
| ETPSQRRATR | SGAQASSTPLSPTR | LMNA_HUMAN | | | Prelamin-A/C; | 0.15 | 0.01 | 72.40 | 1.29 |
| DNARQSAERN | SNLVGAAHEELQQSR | LMNA_HUMAN | | | Prelamin-A/C; | -0.11 | 0.01 | 35.30 | 0.00 |
| ARQSAERNSN | LVGAAHEELQQSR | LMNA_HUMAN | | | Prelamin-A/C; | -0.52 | 0.05 | 36.30 | 0.20 |
| PSQRRATRSG | AQASSTPLSPTR | LMNA_HUMAN | | | Prelamin-A/C; | -0.76 | 0.01 | 44.70 | 8.44 |
| TEVVAPFMAN | IPLLLYPQDGPR | SAP_HUMAN | | | Proactivator polypeptide; | 0.97 | 0.04 | 29.10 | 2.98 |
| PRSKPQPKDN | GDVCQDCIQMVTDIQTAVR | SAP_HUMAN | | | Proactivator polypeptide; | 0.38 | 0.04 | 75.80 | 2.81 |
| EEIMAEKENK | TIIFVETKR | DDX17_HUMAN | | | Probable ATP-dependent RNA helicase DDX17; | 1.37 | 0.06 | 29.70 | 0.09 |
| WVLNEFKHGK | APILIATDVASR | DDX17_HUMAN | DDX5_HUMAN | | Probable ATP-dependent RNA helicase DDX17; | 0.57 | 0.05 | 39.80 | 7.85 |
| ERDWVLNEFR | SGKAPILIATDVASR | DDX17_HUMAN | | | Probable ATP-dependent RNA helicase DDX17; | 0.15 | 0.01 | 43.60 | 1.59 |
| QREFALSNLK | AGAKDILVATDVAGR | DDX23_HUMAN | | | Probable ATP-dependent RNA helicase DDX23; | 0.61 | 0.04 | 52.50 | -1.19 |
| QSEAQINTAK | RLLEKKGKEAVVQEPER | DDX27_HUMAN | | | Probable ATP-dependent RNA helicase DDX27; | 0.45 | 0.04 | 43.60 | 3.93 |
| QKAEGKIIKK | SSGFSGKGFKDETEQALANER | DDX46_HUMAN | | | Probable ATP-dependent RNA helicase DDX46; | 0.61 | 0.04 | 39.60 | 3.39 |
| QKNLGIESQD | VMQQATNAILR | DDX46_HUMAN | | | Probable ATP-dependent RNA helicase DDX46; | -1.52 | 0.18 | 39.40 | 5.94 |
| ERDWVLNEFK | HGKAPILIATDVASR | DDX5_HUMAN | | | Probable ATP-dependent RNA helicase DDX5; | 0.64 | 0.05 | 46.20 | 1.49 |
| HILGDPNLTK | FSVILDEAHER | DHX40_HUMAN | | | Probable ATP-dependent RNA helicase DHX40; | 2.29 | 0.13 | 65.10 | 0.21 |
| | MKDSLVLGR | CIAO1_HUMAN | | | Probable cytosolic iron-sulfur protein CIAO1; | 0.48 | 0.03 | 41.90 | 0.67 |
| DKPISLQNWK | RGLDILSPMER | EXO5_HUMAN | | | Probable exonuclease V; | 4.62 | 0.43 | 36.80 | 6.76 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|-------------------------|-------------|------|------|--|---------------------------------|-----------------------|----------------------|------|
| SPQSSAGGKP | AMSYASALR | HELZ_HUMAN | | | Probable helicase with zinc finger domain; | 3.24 | 0.16 | 24.40 | 0.90 |
| GWLLLAEEKG | DAKPEDNLLVLTVATKETEGFRR | PLOD1_HUMAN | | | Procollagen-lysine,2-oxoglutarate 5- | 1.18 | 0.02 | 41.20 | 0.11 |
| PSVWAAPGK | TFVNITPAEVGVLVGKDR | PROF1_HUMAN | | | Profilin-1; | 0.06 | 0.00 | 47.10 | 4.99 |
| VWAAPGKTF | VNITPAEVGVLVGKDR | PROF1_HUMAN | | | Profilin-1; | -0.88 | 0.05 | 24.80 | 3.57 |
| MYPVFNELER | VNLSAAQTLR | PDC10_HUMAN | | | Programmed cell death | 2.47 | 0.18 | 30.00 | 3.81 |
| PGYIKLRKIR | AAQNISKTIATSQNR | PHB2_HUMAN | | | Prohibitin-2; | 1.37 | 0.12 | 37.60 | 2.21 |
| SGPFEPDLYK | SEMEVQDAELKALLQSSASR | PA2G4_HUMAN | | | Proliferation-associated protein 2G4; | 0.04 | 0.00 | 53.60 | 3.05 |
| VESEAGWGMV | TPDLLFAEGTAAYAR | P3H1_HUMAN | | | Prolyl 3-hydroxylase 1; | 1.11 | 0.07 | 21.60 | 1.53 |
| HGAGWQLFCR | TVWSAHSGPTR | PCSK9_HUMAN | | | Proprotein convertase subtilisin/kexin type 9; | 4.57 | 0.25 | 24.20 | 2.03 |
| AELRQLIHF | SAKDVINEAWFPEDQR | PCSK9_HUMAN | | | Proprotein convertase subtilisin/kexin type 9; | 2.74 | 0.12 | 38.50 | 0.10 |
| PEEDGTRFHR | QASKCDSHGTHLAGVVSGR | PCSK9_HUMAN | | | Proprotein convertase subtilisin/kexin type 9; | 1.19 | 0.08 | 58.70 | 3.88 |
| RFHRQASKCD | SHGTHLAGVVSGR | PCSK9_HUMAN | | | Proprotein convertase subtilisin/kexin type 9; | 0.54 | 0.03 | 35.70 | 4.66 |
| GGKLCRAHN | AFGGEGVYAIAR | PCSK9_HUMAN | | | Proprotein convertase subtilisin/kexin type 9; | 0.37 | 0.02 | 50.70 | 0.16 |
| IEEDSSVFAQ | SIPWNLER | PCSK9_HUMAN | | | Proprotein convertase | -0.02 | 0.00 | 22.90 | 1.25 |
| GVAAPRRLRR | AADHDVGSSELPPGVLGALLR | PCSK1_HUMAN | | | ProSAAS; | 1.31 | 0.11 | 61.50 | 4.19 |
| ETGAPRRFR | SVPRGEAAGAVQELAR | PCSK1_HUMAN | | | ProSAAS; | 1.31 | 0.10 | 42.50 | 1.40 |
| LLGVLGDLQA | APEAQVSVQPNFQQDKFLGR | PTGDS_HUMAN | | | Prostaglandin-H2 D- | 8.85 | 0.99 | 29.10 | 2.33 |
| GVLGDLQAAP | EAQVSVQPNFQQDKFLGR | PTGDS_HUMAN | | | Prostaglandin-H2 D-isomerase; | 6.58 | 1.40 | 38.40 | 4.61 |
| EEPGEMLHG | TTTTLAFKFR | PSB5_HUMAN | | | Proteasome subunit beta | 0.22 | 0.02 | 15.40 | 2.60 |
| RDGSSGGVIR | LAAIAESGVER | PSB6_HUMAN | | | Proteasome subunit beta type-6; | 3.83 | 0.45 | 48.10 | 1.66 |
| YKLPKVRKTG | TTIAGVVYKDGIVLGADTR | PSB7_HUMAN | | | Proteasome subunit beta type-7; | 0.13 | 0.01 | 70.90 | 2.53 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|-------------------------|-------------|------|------|-------------------------------------|---------------------------------|-----------------------|----------------------|------|
| LPSKCEVCKL | LSTELQAELSR | CNPY4_HUMAN | | | Protein canopy homolog 4; | 0.92 | 0.09 | 35.70 | 2.82 |
| PPTQPSPASD | SGSGYVPGSVSAAFVTCNEKVAK | CUTA_HUMAN | | | Protein CutA; | -1.65 | 0.16 | 41.90 | 1.71 |
| MEDQDGLLGK | ELGFDASEVELTR | CYR61_HUMAN | | | Protein CYR61; | -0.58 | 0.05 | 59.90 | 1.40 |
| IAVGKGSSLK | RLPVFGMEPR | CYR61_HUMAN | | | Protein CYR61; | -0.96 | 0.02 | 51.20 | 2.75 |
| LLHLTRLALS | TCPAACHCPLEAPKCAPGVGLVR | CYR61_HUMAN | | | Protein CYR61; | -1.00 | 0.04 | 47.50 | 1.74 |
| LLAAARLAAA | SDVLELTDDNFESR | PDIA3_HUMAN | | | Protein disulfide- | 0.37 | 0.02 | 85.10 | 2.33 |
| WVVLPSWLSS | AKVSSLIER | PDIA5_HUMAN | | | Protein disulfide-isomerase A5; | 0.89 | 0.10 | 24.60 | 1.89 |
| SCTFFLAVNG | LYSSSDDVIELTPSNFNR | PDIA6_HUMAN | | | Protein disulfide-isomerase A6; | 0.20 | 0.01 | 77.60 | 5.27 |
| CLAVAALVRA | DAPEEEDHVLVLR | PDIA1_HUMAN | | | Protein disulfide- | 0.28 | 0.02 | 44.70 | 1.74 |
| | M AVTGWLESLR | DPCD_HUMAN | | | Protein DPCD; | 0.61 | 0.03 | 44.10 | 1.63 |
| LLSLGRFVRG | DGVGGDPAVALPHR | LMAN1_HUMAN | | | Protein ERGIC-53; | 0.70 | 0.02 | 56.80 | 3.08 |
| PETPAPAARS | AAPSSVPAAPGPEPRVVR | F110C_HUMAN | | | Protein FAM110C; | 0.20 | 0.01 | 35.30 | 2.22 |
| TFYVISQVFE | IKMDASLGNLFAR | FAM3C_HUMAN | | | Protein FAM3C; | 0.70 | 0.02 | 37.60 | 2.01 |
| VISQVFEIKM | DASLGNLFAR | FAM3C_HUMAN | | | Protein FAM3C; | 0.53 | 0.03 | 47.20 | 2.11 |
| YVISQVFEIK | MDASLGNLFAR | FAM3C_HUMAN | | | Protein FAM3C; | 0.30 | 0.02 | 43.00 | 2.20 |
| RRLIADLGST | SITNLGFR | FAM3C_HUMAN | | | Protein FAM3C; | -2.34 | 0.24 | 33.70 | 1.49 |
| RDAEKKDQMK | ADLTALFLPR | FLII_HUMAN | | | Protein flightless-1 homolog; | 0.84 | 0.07 | 48.30 | 4.34 |
| | M FGCLVAGR | CK073_HUMAN | | | Protein Hikeshi; | 0.33 | 0.03 | 25.70 | 0.19 |
| IMALMNTLLY | LCLDHFFIAPR | SG196_HUMAN | | | Protein kinase-like protein | 1.13 | 0.07 | 29.90 | 1.83 |
| MALMNTLLYL | CLDHFFIAPR | SG196_HUMAN | | | Protein kinase-like protein SgK196; | 0.31 | 0.01 | 44.10 | 0.31 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|-------------|------------------------|-------------|-------------|------|--|---------------------------------|-----------------------|----------------------|-------|
| LLLPA SLTGG | VGSLNLEELSEMR | OS9_HUMAN | | | Protein OS-9; | 1.37 | 0.06 | 54.90 | 1.79 |
| RSRQARQSRR | STQGVTLTDLQEAETIGR | MYPT1_HUMAN | | | Protein phosphatase 1 | -0.96 | 0.07 | 49.60 | 3.45 |
| GGKRAARPAT | AGKAGGA AVVITEPEHTKER | RCC2_HUMAN | | | Protein RCC2; | 0.22 | 0.02 | 39.20 | -0.80 |
| RSSRTNPETK | SKVEDPEINSIQDIKEGQLLR | RRP5_HUMAN | | | Protein RRP5 homolog; | 1.15 | 0.07 | 49.90 | 2.78 |
| GLQPLKLDYR | ALAAVPSAGSVQR | SCRIB_HUMAN | | | Protein scribble homolog; | 1.23 | 0.12 | 32.30 | 5.34 |
| VTTFVNHPQV | SALLGEEDEEALHYLTR | SET_HUMAN | | | Protein SET; | -1.04 | 0.07 | 33.00 | 0.66 |
| SLVISQGADG | RGKPEVVS VVGR | TUTLA_HUMAN | | | Protein turtle homolog A; | 0.18 | 0.01 | 23.50 | 1.70 |
| NIPPIQRVPR | DIPAMLPAAR | YIPF3_HUMAN | | | Protein YIPF3; | 0.45 | 0.02 | 31.40 | 1.56 |
| MAWK | SGGASHSELIHNLR | PIMT_HUMAN | | | Protein-L-isoaspartate(D-aspartate) O-methyltransferase; | 0.18 | 0.02 | 62.50 | 1.86 |
| PLQLCALVHC | APPAAGQQPPREPPA APGAWR | LYOX_HUMAN | | | Protein-lysine 6-oxidase; | 4.53 | 0.20 | 48.70 | 1.62 |
| SPWQV MLFRK | SPQELLCGASLISDR | THRB_HUMAN | | | Prothrombin; | -0.07 | 0.00 | 68.30 | -0.65 |
| MSPWQV MLFR | KSPQELLCGASLISDR | THRB_HUMAN | | | Prothrombin; | -0.21 | 0.01 | 60.40 | 1.25 |
| DTSSEITTKD | LKEKKEVVEEAENGR | PTMA_HUMAN | | | Prothymosin alpha; | -0.21 | 0.02 | 34.80 | 1.95 |
| GRLAHEVGWK | YQAVTATLEEKR | R13AX_HUMAN | RL13A_HUMAN | | Putative 60S ribosomal | -0.24 | 0.02 | 35.20 | 2.23 |
| YVSHMKETQK | STYYITGESKEQVANS AFVER | H90B3_HUMAN | | | Putative heat shock protein HSP 90-beta-3; | 2.51 | 0.13 | 48.40 | -4.45 |
| AKVNDTTPNN | FPLLYEEALR | MA13P_HUMAN | MAGB4_HUMAN | | Putative MAGE domain-containing protein | 1.78 | 0.14 | 26.00 | 1.09 |
| MSAQ AQMR | ALLDQLMG TAR | LUC7L_HUMAN | | | Putative RNA-binding protein Luc7-like 1; | -0.11 | 0.01 | 48.20 | 4.82 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|----------------------------|-------------|------------|------|--|---------------------------------|-----------------------|----------------------|-------|
| MSAQAQMR | AMLDQLMGTSR | LC7L2_HUMAN | | | Putative RNA-binding protein Luc7-like 2; | 0.09 | 0.01 | 36.60 | -1.19 |
| EGLMKVEAAR | LSAQDPVVAEADGR | S38AA_HUMAN | | | Putative sodium-coupled neutral amino acid transporter 10; | 0.75 | 0.04 | 54.50 | 7.36 |
| MA | ASGSPGPTSPGPGR | YJ017_HUMAN | | | Putative uncharacterized protein LOC439951; | 2.94 | 0.21 | 27.90 | 2.96 |
| RVVDDELATR | FLKSFKANLENPIR | ODPX_HUMAN | | | Pyruvate dehydrogenase protein X component, | 6.45 | 0.49 | 24.30 | 1.93 |
| ADTFLEHMCR | LDIDSPPIR | KPYM_HUMAN | | | Pyruvate kinase isozymes | 8.04 | 0.56 | 52.20 | 3.18 |
| DIDSPPIR | NTGIICTIGPASR | KPYM_HUMAN | | | Pyruvate kinase isozymes M1/M2; | 1.39 | 0.09 | 60.70 | 3.01 |
| SPLSYRPVAI | ALDTKGPEIR | KPYM_HUMAN | KPYR_HUMAN | | Pyruvate kinase isozymes M1/M2; | 0.93 | 0.06 | 25.10 | 2.42 |
| YHAETIKNVR | TATESFASDPILYR | KPYM_HUMAN | | | Pyruvate kinase isozymes M1/M2; | 0.59 | 0.05 | 67.40 | 4.50 |
| GTAFIQTQQL | HAAMADTFLEHMCR | KPYM_HUMAN | | | Pyruvate kinase isozymes | 0.37 | 0.02 | 39.50 | 6.66 |
| VLGEKGKNIK | IISKIENHEGVR | KPYM_HUMAN | | | Pyruvate kinase isozymes | 0.35 | 0.04 | 54.80 | 8.06 |
| SKIENHEGVR | RFDEILEASDGIMVAR | KPYM_HUMAN | | | Pyruvate kinase isozymes | 0.22 | 0.01 | 50.90 | 6.40 |
| YHAETIKNVR | TATESFASDPILYRPVAVALDTKGPE | KPYM_HUMAN | | | Pyruvate kinase isozymes | 0.17 | 0.00 | 36.40 | 1.14 |
| TAFIQTQQLH | AAMADTFLEHMCR | KPYM_HUMAN | | | Pyruvate kinase isozymes | -0.16 | 0.01 | 35.20 | 5.85 |
| TQQLHAAMAD | TFLEHMCR | KPYM_HUMAN | | | Pyruvate kinase isozymes | -0.24 | 0.01 | 27.70 | 2.48 |
| QTQQLHAAMA | DTFLEHMCR | KPYM_HUMAN | | | Pyruvate kinase isozymes M1/M2; | -0.26 | 0.02 | 29.20 | 1.12 |
| GAVEASFKCC | SGAIIVLTKSGR | KPYM_HUMAN | | | Pyruvate kinase isozymes M1/M2; | -1.72 | 0.23 | 32.10 | 4.56 |
| KPIEEIIVQN | GKVIGVKSEGEIAR | GDIB_HUMAN | | | Rab GDP dissociation | -0.69 | 0.07 | 30.30 | 2.91 |
| QDQTTVRTVA | SATTAIEIR | REPS1_HUMAN | | | RalBP1-associated Eps domain-containing protein | 0.04 | 0.01 | 33.40 | 2.41 |
| LFKMRAKLF | FASENDLPEWKER | RANG_HUMAN | | | Ran-specific GTPase- | 0.30 | 0.02 | 35.40 | 2.14 |
| SDRAWVWNTH | ADFADECPPELLAIR | RANG_HUMAN | | | Ran-specific GTPase- | -1.29 | 0.10 | 29.00 | -1.42 |
| SAAEVDGLG | VARPHYGSVLDNER | IQGA1_HUMAN | | | Ras GTPase-activating-like protein IQGAP1; | 0.17 | 0.01 | 34.80 | 1.88 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|------------------------|-------------|-------------|-------------|--|---------------------------------|-----------------------|----------------------|-------|
| MSAADEVD | GLGVARPHYGSVLDNER | IQGA1_HUMAN | | | Ras GTPase-activating-like protein IQGAP1; | -0.40 | 0.04 | 55.50 | 1.23 |
| WDTAGQERFW | TITSSYYR | RAB1A_HUMAN | RAB1B_HUMAN | RAB1C_HUMAN | Ras-related protein Rab- | 0.87 | 0.10 | 34.80 | 3.92 |
| VNKKFSNQYK | ATIGADFLTKEVMVDDR | RAB7A_HUMAN | | | Ras-related protein Rab-7a; | 0.31 | 0.01 | 37.40 | 7.12 |
| LQDLREQILR | VKDTDDVPMILVGNKCDLEDER | RAP1B_HUMAN | RP1BL_HUMAN | | Ras-related protein Rap-1b; | 0.59 | 0.04 | 54.70 | 1.95 |
| LALLPPGAAS | TQVCTGTDMKLR | ERBB2_HUMAN | | | Receptor tyrosine-protein | 0.85 | 0.08 | 42.40 | -2.09 |
| TKEDEMPVGR | NVLELSNVVR | PTPRF_HUMAN | | | Receptor-type tyrosine- | 2.17 | 0.24 | 47.70 | 5.97 |
| GGLGGSGGLR | LLLCLLLSSR | PTPRN_HUMAN | | | Receptor-type tyrosine-protein phosphatase-like N; | 6.01 | 0.52 | 23.00 | 0.60 |
| VPGKVELQEK | VVQVSAGDSHTAALTDDGR | RCC1_HUMAN | | | Regulator of chromosome condensation; | 0.57 | 0.06 | 71.10 | 0.52 |
| AASGASSALE | AGGSSGLEDVPLLQQADELHR | RMD3_HUMAN | | | Regulator of microtubule dynamics protein 3; | -1.00 | 0.12 | 70.70 | 5.81 |
| VEKITTLLK | AGAKPDQIGIHPYEGQR | RENT1_HUMAN | | | Regulator of nonsense | 1.02 | 0.08 | 30.40 | 5.63 |
| LLALVAGVLG | NEFSILKSPGSVVFR | RENH_HUMAN | | | Renin receptor; | 0.90 | 0.01 | 34.00 | 7.31 |
| LALVAGVLGN | EFNILKSPGSVVFR | RENH_HUMAN | | | Renin receptor; | 0.60 | 0.02 | 29.40 | 8.37 |
| MLPRDERRFK | AADLNGDLTATR | RCN1_HUMAN | | | Reticulocalbin-1; | -0.07 | 0.00 | 48.00 | 0.00 |
| LLCAAAGA | GKAEELHYPLGER | RCN2_HUMAN | | | Reticulocalbin-2; | 1.26 | 0.09 | 44.80 | 1.72 |
| SVNYKPPAQK | SIQEIQELDKDDESLR | GDIR1_HUMAN | | | Rho GDP-dissociation inhibitor 1; | 0.13 | 0.01 | 47.10 | -0.05 |
| KDDESLIKYK | KTLLGDGPVVTDPKAPNVVVTR | GDIR2_HUMAN | | | Rho GDP-dissociation | -0.24 | 0.01 | 34.10 | -1.81 |
| MWDQ | RLVKLALLQHLR | RHGBB_HUMAN | | | Rho GTPase-activating protein 11B; | 4.19 | 0.53 | 14.70 | 9.02 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|------------------------|-------------|-------------|------|---------------------------------------|---------------------------------|-----------------------|----------------------|-------|
| EKEEDARPNA | AAPALGPVGLSDLSKVR | RHG27_HUMAN | | | Rho GTPase-activating protein 27; | -0.26 | 0.01 | 26.40 | 3.41 |
| FQEPTEPKTK | AAAPGVEDEPLLR | RIR2_HUMAN | | | Ribonucleoside-diphosphate reductase | 1.85 | 0.19 | 55.30 | 7.76 |
| EKAQEQQQQM | AELHSKLOSSEAEVR | RRBP1_HUMAN | | | Ribosome-binding protein 1; | -0.83 | 0.09 | 33.30 | 2.05 |
| KQGQEVPPR | RGPAVPPAR | REXO1_HUMAN | | | RNA exonuclease 1 homolog; | -1.40 | 0.11 | 22.00 | 7.74 |
| | M VKLFIGNLPR | RBM4B_HUMAN | RBM4_HUMAN | | RNA-binding protein 4B; | 0.93 | 0.02 | 41.10 | 1.65 |
| SAKAAIDWFD | GKEFSGNPIKVSFATR | FUS_HUMAN | | | RNA-binding protein | -1.65 | 0.05 | 30.80 | 1.74 |
| ARQRSRAWLK | EGGGDEPLNFLDPKVAQR | RRP12_HUMAN | | | RRP12-like protein; | 1.04 | 0.03 | 28.80 | 1.99 |
| | M KIEEVKSTTKTQR | RUVB1_HUMAN | | | RuvB-like 1; | 0.76 | 0.06 | 24.70 | 3.52 |
| LGLDDALEPR | QASQGMVGLAAR | RUVB2_HUMAN | | | RuvB-like 2; | 1.04 | 0.08 | 40.80 | 4.83 |
| LKNLFSKYGK | VVGAKVVTNAR | SAFB1_HUMAN | SAFB2_HUMAN | | Scaffold attachment factor B1; | 0.43 | 0.04 | 40.80 | 3.08 |
| ESTAHAQSSK | ADSL LAVVKR | SAFB1_HUMAN | SAFB2_HUMAN | | Scaffold attachment factor B1; | 0.26 | 0.02 | 30.50 | 2.30 |
| KHDKKGNKED | YDLSKMR | SCG3_HUMAN | | | Secretogranin-3; | -6.06 | 0.00 | 18.60 | 2.55 |
| VIQHRPSRQY | ATLDVYNPFETR | SCAM3_HUMAN | | | Secretory carrier-associated membrane | 0.15 | 0.01 | 48.00 | 2.53 |
| VKGSSQPQAR | VYLTFDEL R | SEM3C_HUMAN | | | Semaphorin-3C; | 2.96 | 0.18 | 34.10 | 2.62 |
| AARLWGLGIG | AEVWWNLVPR | SEM4C_HUMAN | | | Semaphorin-4C; | 0.86 | 0.04 | 45.00 | 3.08 |
| LLLLLGAHG | LFPEEPPPLSVAPR | SEM6B_HUMAN | | | Semaphorin-6B; | 2.51 | 0.04 | 44.50 | 4.94 |
| KRENIRSLTM | SGHVG FESLPDQLVNR | SEP10_HUMAN | | | Septin-10; | -1.00 | 0.08 | 42.60 | -2.79 |
| INPETPGYVG | FANLPNQVHR | SEPT2_HUMAN | | | Septin-2; | -0.07 | 0.01 | 37.70 | 2.84 |
| EERSVNSSTM | VAQQKNLEGYVGFANLPNQVYR | SEPT7_HUMAN | | | Septin-7; | -0.02 | 0.00 | 75.80 | 3.00 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|----------------------|-------------|------------|------------|--|---------------------------------|-----------------------|----------------------|-------|
| PAPVSQLQSR | LEPKQPQPPVAEATPR | SEPT9_HUMAN | | | Septin-9; | 1.18 | 0.04 | 39.70 | 2.41 |
| AIGPSRFGLK | RAEVLGHKTPEPAPR | SEPT9_HUMAN | | | Septin-9; | 0.57 | 0.02 | 31.40 | 3.82 |
| SVAAALSPLG | IEVDIDVEHGGKR | SQSTM_HUMAN | | | Sequestosome-1; | 0.64 | 0.06 | 32.20 | 2.73 |
| AIGSPFSLQN | TVTTGIVSTTQR | HTRA1_HUMAN | | | Serine protease HTRA1; | 1.83 | 0.29 | 68.10 | -4.10 |
| ASAQLSRAGR | SAPLAAGCPDR | HTRA1_HUMAN | | | Serine protease HTRA1; | 0.81 | 0.03 | 48.80 | -1.92 |
| IRETQEKRFK | DPGLVDQLVKADSEWR | SYSC_HUMAN | | | Serine--tRNA ligase, cytoplasmic; | 0.80 | 0.03 | 41.90 | 2.58 |
| | M VLDLDFLR | SYSC_HUMAN | | | Serine--tRNA ligase, cytoplasmic; | 0.18 | 0.00 | 25.90 | 0.78 |
| ISGHTSGIKK | ALWCSEDKQILSADDKTVR | STRAP_HUMAN | | | Serine-threonine kinase receptor-associated protein; | 0.51 | 0.04 | 35.90 | 1.67 |
| LPVQPEVALK | RVPSPTPAPKEAVR | SRRM2_HUMAN | | | Serine/arginine repetitive matrix protein 2; | 1.02 | 0.08 | 33.90 | 1.40 |
| AAAMNLSAPR | TAVAPSAVNLADPR | SRRM2_HUMAN | | | Serine/arginine repetitive matrix protein 2; | 0.33 | 0.03 | 36.70 | 3.18 |
| DERGGEGDGR | IYVGNLPTDVR | SRSF9_HUMAN | | | Serine/arginine-rich splicing factor 9; | 3.70 | 0.18 | 35.80 | 2.67 |
| DEIKAHPFFK | TIDFSSDLR | LATS1_HUMAN | | | Serine/threonine-protein kinase LATS1; | -0.26 | 0.01 | 27.20 | 1.20 |
| LLNAPTKRPR | SSTVTEAPIAVVTSR | NEK9_HUMAN | | | Serine/threonine-protein kinase Nek9; | 1.42 | 0.15 | 72.10 | 4.77 |
| LPYEELQGLK | VASEAPLEHKPQVEASSPR | NEK9_HUMAN | | | Serine/threonine-protein kinase Nek9; | 0.86 | 0.07 | 47.50 | 1.72 |
| YEELQGLKVA | SEAPLEHKPQVEASSPR | NEK9_HUMAN | | | Serine/threonine-protein kinase Nek9; | 0.22 | 0.03 | 33.10 | -0.26 |
| EPAKTAQALS | SGSGSQETKIPISLVLR | OXR1_HUMAN | | | Serine/threonine-protein kinase OSR1; | 0.60 | 0.03 | 32.70 | 4.97 |
| LPVTPTRDVA | TSPISPTEENNTTPPDALTR | PAK1_HUMAN | | | Serine/threonine-protein kinase PAK1; | -0.26 | 0.03 | 55.00 | 8.06 |
| AAYFDSARLR | AAGIGKDFKENPNLR | PRP4B_HUMAN | | | Serine/threonine-protein kinase PRP4 homolog; | 0.81 | 0.06 | 27.20 | 4.73 |
| ILYQTVTGLK | KDLSGVQKVPALLENQVEER | RIOK1_HUMAN | | | Serine/threonine-protein kinase RIOK1; | 0.94 | 0.03 | 38.00 | 1.50 |
| SHEPEFDYLK | SLEIEEKINKIR | 2ABA_HUMAN | 2ABB_HUMAN | 2ABD_HUMAN | Serine/threonine-protein kinase 2ABD_HUMAN; | -0.04 | 0.00 | 26.60 | 4.44 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|--------------------------|-------------|-------------|------|--|---------------------------------|-----------------------|----------------------|-------|
| MAP | LDLDKYVEIAR | PPP6_HUMAN | | | Serine/threonine-protein phosphatase 6 catalytic | 0.96 | 0.06 | 21.20 | 1.01 |
| M | APLDLDKYVEIAR | PPP6_HUMAN | | | Serine/threonine-protein phosphatase 6 catalytic | 0.35 | 0.03 | 13.90 | 0.89 |
| MFWK | FDLHSSSHIDTLER | PP6R3_HUMAN | | | Serine/threonine-protein | 0.48 | 0.02 | 30.20 | 2.83 |
| NKCVPSNER | YYGYTGAFR | TRFE_HUMAN | TRFL_HUMAN | | Serotransferrin; | 2.28 | 0.14 | 25.10 | 2.57 |
| AEGHSEASLA | SALVEGEIAEEAAEKATSR | SDPR_HUMAN | | | Serum deprivation-response protein; | 1.10 | 0.05 | 55.10 | 3.94 |
| SNHQKISSGK | SSPFKVSPLTFGR | SDPR_HUMAN | | | Serum deprivation-response protein; | 1.00 | 0.05 | 29.90 | -1.49 |
| FAEGHSEASL | ASALVEGEIAEEAAEKATSR | SDPR_HUMAN | | | Serum deprivation- | 0.59 | 0.04 | 43.70 | 1.62 |
| EESFAEGHSE | ASLASALVEGEIAEEAAEKATSR | SDPR_HUMAN | | | Serum deprivation-response protein; | 0.45 | 0.03 | 43.50 | 6.69 |
| EGHSEASLAS | ALVEGEIAEEAAEKATSR | SDPR_HUMAN | | | Serum deprivation- | 0.38 | 0.03 | 35.10 | 3.50 |
| EEESFAEGHS | EASLASALVEGEIAEEAAEKATSR | SDPR_HUMAN | | | Serum deprivation-response protein; | -0.40 | 0.05 | 47.70 | 2.16 |
| INGSAPRDLF | DMKPFEDALR | SHC1_HUMAN | | | SHC-transforming protein 1; | -0.11 | 0.01 | 28.60 | 0.70 |
| DMKPFEDALR | VPPPPQSVSMAEQLR | SHC1_HUMAN | | | SHC-transforming protein 1; | -0.43 | 0.04 | 31.60 | 3.11 |
| RLISLFTANS | HLGPLQISLGR | TRPC4_HUMAN | TRPC5_HUMAN | | Short transient receptor | 4.16 | 0.47 | 25.10 | 5.65 |
| RHITLDKTKW | GSDHSASLEPGELAEQVR | SIAS_HUMAN | | | Sialic acid synthase; | 0.04 | 0.00 | 41.40 | 4.15 |
| SEQDLEKLG | KSPPPPPPPR | SKT_HUMAN | | | Sickle tail protein homolog; | 8.47 | 1.37 | 49.00 | 3.76 |
| M | VLLESEQFLTELTR | SRP14_HUMAN | | | Signal recognition particle 14 kDa protein; | 0.02 | 0.00 | 76.40 | 3.57 |
| EVNSDAGAFK | NSLKDLPDVQELITQVR | SRP68_HUMAN | | | Signal recognition particle | 1.51 | 0.14 | 49.20 | 8.04 |
| EQRQQSTTLS | TLYPSTSSLLTNHQHEGR | STAM1_HUMAN | | | Signal transducing adapter molecule 1; | -0.72 | 0.06 | 36.70 | 2.26 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|-------------|----------------------|-------------|------|------|---|---------------------------------|-----------------------|----------------------|-------|
| LQVLRQFVRH | ESETTTSVLER | SSBP_HUMAN | | | Single-stranded DNA-binding protein, | 0.20 | 0.02 | 54.70 | 3.50 |
| PGKSSILQHE | RPASLYQSSIDR | SRBS2_HUMAN | | | Sorbin and SH3 domain- | -6.06 | 0.00 | 32.60 | 5.18 |
| IAPRIESKSM | SAPVIFDR | SNX2_HUMAN | | | Sorting nexin-2; | -0.40 | 0.03 | 33.60 | 2.13 |
| VKKIHENEKR | LEAGDHPVELLAR | SPRC_HUMAN | | | SPARC; | 0.45 | 0.03 | 41.70 | 1.52 |
| FGQLDQHPIID | GYLSHTELAFLR | SPRC_HUMAN | | | SPARC; | -0.52 | 0.03 | 34.60 | -0.86 |
| IAALQAFADQ | LIAAGHYAKGDISSR | SPTA2_HUMAN | | | Spectrin alpha chain, non- | -0.62 | 0.05 | 32.50 | 2.70 |
| VQEEKIAALQ | AFADQLIAAGHYAKGDISSR | SPTA2_HUMAN | | | Spectrin alpha chain, non-erythrocytic 1; | -0.76 | 0.06 | 55.20 | 1.30 |
| AALQAFADQL | IAAGHYAKGDISSR | SPTA2_HUMAN | | | Spectrin alpha chain, non- | -0.88 | 0.08 | 23.10 | 2.99 |
| ETDIAAYEER | VQAVVAVAR | SPTB2_HUMAN | | | Spectrin beta chain, non- | 1.36 | 0.15 | 25.80 | 2.76 |
| PSPTSDRKAK | TALPAQSAATLPAR | SPTB2_HUMAN | | | Spectrin beta chain, non-erythrocytic 1; | 0.13 | 0.01 | 63.10 | 2.07 |
| EEYWNSKFK | AFTFDDDELSQLKESKR | VIPAR_HUMAN | | | Spermatogenesis-defective protein 39 | 0.72 | 0.07 | 44.80 | -0.88 |
| ATPTPGHIMS | MTPEQLQAWR | SF3B1_HUMAN | | | Splicing factor 3B subunit 1; | -0.88 | 0.05 | 40.60 | 1.24 |
| KEHELLEQK | RAAVLLEQER | SF3B2_HUMAN | | | Splicing factor 3B subunit 2; | 0.81 | 0.06 | 32.10 | 4.53 |
| QAKSQRTKQS | TVLAPVIDLKR | SPF45_HUMAN | | | Splicing factor 45; | 1.55 | 0.12 | 32.30 | 1.09 |
| LPTMTPDGLA | VTPTVPVVGSMTR | U2AF2_HUMAN | | | Splicing factor U2AF 65 kDa subunit; | -0.14 | 0.01 | 42.60 | 2.37 |
| TALLPTMTPD | GLAVTPTVPVVGSMTR | U2AF2_HUMAN | | | Splicing factor U2AF 65 kDa subunit; | -1.29 | 0.10 | 71.30 | 3.69 |
| GEKTYTQRCR | LFVGNLPADITEDEFKR | SFPQ_HUMAN | | | Splicing factor, proline- and glutamine-rich; | 2.03 | 0.12 | 31.90 | 4.30 |
| VKASFAPISF | AIKAKENDLLPLEKNR | SFSWA_HUMAN | | | Splicing factor, suppressor | -1.04 | 0.13 | 39.00 | 2.31 |
| YGVQADRVDK | SAVGFDYQGKTEKHESQR | SRC8_HUMAN | | | Src substrate cortactin; | 0.68 | 0.05 | 29.30 | 3.27 |
| RPAKPPVVDK | SLKPGALSNSESIPTIDGLR | STABP_HUMAN | | | STAM-binding protein; | -1.00 | 0.06 | 40.40 | 3.15 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|------------------------|-------------|------|------|------------------------------------|---------------------------------|-----------------------|----------------------|-------|
| KLNVCIAKR | NPEAITEVVQLPNHFSNR | STC1_HUMAN | | | Stanniocalcin-1; | 4.68 | 0.44 | 47.90 | 5.06 |
| ELEKRASGQA | FELILSPR | STMN1_HUMAN | | | Stathmin; | -0.80 | 0.03 | 26.70 | 2.58 |
| FNDSQRQATK | DAGQISGLNVLR | GRP75_HUMAN | | | Stress-70 protein, mitochondrial; | 1.28 | 0.14 | 54.70 | 2.03 |
| YTKAMDVYQK | ALDLSSCKEAADGYQR | STIP1_HUMAN | | | Stress-induced- | 0.11 | 0.01 | 32.80 | 1.84 |
| AGLTVANEAD | SLTYDIANNKDALR | STRN_HUMAN | | | Striatin; | -1.96 | 0.23 | 33.20 | -0.97 |
| FSNNHPGAGG | AKGLGPLAEAAAAGDGAAAAGA | STRN_HUMAN | | | Striatin; | -3.46 | 0.00 | 36.70 | -0.34 |
| SQHKGVAVRR | VLNTEANVVR | QSOX1_HUMAN | | | Sulfhydryl oxidase 1; | 10.56 | 0.00 | 47.50 | 2.19 |
| KRQKRNKIPY | SFFKTALDDR | QSOX1_HUMAN | | | Sulfhydryl oxidase 1; | 3.08 | 0.22 | 29.20 | 1.27 |
| PLGQWHLSCR | DTGAALLAESR | QSOX1_HUMAN | | | Sulfhydryl oxidase 1; | 2.13 | 0.16 | 55.60 | 2.47 |
| GPLEVRRVGR | SSKQLVDIPEGQLEAR | QSOX1_HUMAN | | | Sulfhydryl oxidase 1; | 2.03 | 0.19 | 61.40 | 1.75 |
| ANAAPRSALY | SPSDPLTLLQADTVR | QSOX1_HUMAN | | | Sulfhydryl oxidase 1; | 1.72 | 0.07 | 42.10 | -2.38 |
| AVPGANAAPR | SALYSPSDPLTLLQADTVR | QSOX1_HUMAN | | | Sulfhydryl oxidase 1; | 1.48 | 0.21 | 113.30 | 4.24 |
| LAVPGANAAP | RSALYSPSDPLTLLQADTVR | QSOX1_HUMAN | | | Sulfhydryl oxidase 1; | 1.35 | 0.05 | 80.90 | 3.49 |
| VRRVGRSSKQ | LVDIPEGQLEAR | QSOX1_HUMAN | | | Sulfhydryl oxidase 1; | 1.24 | 0.12 | 43.10 | 3.21 |
| GFHVHEFGDN | TAGCTSAGPHFNPLSR | SODC_HUMAN | | | Superoxide dismutase [Cu-Zn]; | 1.03 | 0.05 | 28.80 | -1.81 |
| LLLGALSGWA | ASDDPIEKVIEGINR | SBSN_HUMAN | | | Suprabasin; | 3.69 | 0.18 | 34.80 | -0.35 |
| SEDVSNKVSM | SSTVQGSNIFER | SDC4_HUMAN | | | Syndecan-4; | 1.50 | 0.09 | 47.60 | 1.99 |
| LFFVGGVAES | IRETEVIDPQDLLEGR | SDC4_HUMAN | | | Syndecan-4; | 1.25 | 0.07 | 69.20 | 3.49 |
| GLSLNEEEIR | ANVAVVSGAPLQGQLVAR | SDCB1_HUMAN | | | Syntenin-1; | 3.53 | 0.36 | 41.60 | 6.74 |
| LVARPSSINY | MVAPVTGNDVGIR | SDCB1_HUMAN | | | Syntenin-1; | 0.50 | 0.06 | 53.50 | 5.43 |
| FARSLLVIPN | TLAVNAAQDSTDVAKLR | TCPA_HUMAN | | | T-complex protein 1 subunit alpha; | 0.96 | 0.07 | 47.30 | -1.13 |
| MASLS | LAPVNIFKAGADEER | TCPB_HUMAN | | | T-complex protein 1 | 0.00 | 0.00 | 33.20 | 2.94 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|--------------------------|-------------|------|------|--|---------------------------------|-----------------------|----------------------|-------|
| NKLVIEEAER | SIHDALCVIR | TCPD_HUMAN | | | T-complex protein 1 subunit delta; | 0.20 | 0.01 | 35.60 | 1.24 |
| DTEPLIQTAK | TTLGSKVVNSCHR | TCPE_HUMAN | | | T-complex protein 1 subunit epsilon; | 0.79 | 0.07 | 33.70 | 2.55 |
| MTGVEQWPYR | AVAQALEVIPR | TCPG_HUMAN | | | T-complex protein 1 subunit gamma; | 0.87 | 0.06 | 52.30 | 5.16 |
| LVCCSAKNLR | DIDEVSSLLR | TCPQ_HUMAN | | | T-complex protein 1 subunit theta; | 2.42 | 0.23 | 48.00 | 4.68 |
| KAPGFAQMLK | EGAKHFSGLEEAAYR | TCPQ_HUMAN | | | T-complex protein 1 | 0.57 | 0.05 | 29.60 | 0.40 |
| VGDTQVVVFK | HEKEDGAISTIVLR | TCPQ_HUMAN | | | T-complex protein 1 subunit theta; | 0.50 | 0.04 | 47.90 | 1.22 |
| TVSRTPCDPD | LPYICTAQNPVSQR | LY9_HUMAN | | | T-lymphocyte surface | 4.69 | 0.39 | 26.40 | -0.18 |
| TMLEDSVSPK | KSTVLQQQYNR | TLN1_HUMAN | | | Talin-1; | 0.59 | 0.05 | 31.20 | 1.60 |
| IVISAKTMLE | SAGGLIQTAR | TLN1_HUMAN | | | Talin-1; | 0.30 | 0.02 | 39.60 | 0.69 |
| LREAAEGLRM | ATNAAAQNAIKKKLVQR | TLN1_HUMAN | | | Talin-1; | 0.24 | 0.01 | 25.50 | 3.61 |
| VANSTANLVK | TIKALDGAFTEENR | TLN1_HUMAN | | | Talin-1; | -0.14 | 0.01 | 39.50 | -5.93 |
| ASGPENFQVG | SMPPAQQQITSGQMHR | TLN1_HUMAN | | | Talin-1; | -0.62 | 0.02 | 43.90 | -0.38 |
| LEAVDNLSAF | ASNPEFSSIPAQISPEGR | TLN1_HUMAN | | | Talin-1; | -1.24 | 0.12 | 79.70 | 6.50 |
| AVAHALHSLL | GCDKSTCTKR | TS1R2_HUMAN | | | Taste receptor type 1 member 2; | 5.85 | 0.24 | 14.80 | 3.01 |
| PSRTAPGALT | AKPPLAPKPGTTVASGV TAR | TB10B_HUMAN | | | TBC1 domain family member 10B; | -0.07 | 0.00 | 27.30 | -0.35 |
| QYKDRDGQPQ | VVPVEGSLR | TENX_HUMAN | | | Tenascin-X; | 6.85 | 0.67 | 24.10 | 2.84 |
| VKGCTAMIGC | RLMSGILAVGPMFVR | TX101_HUMAN | | | Testis-expressed sequence 101 protein; | -1.87 | 0.14 | 25.70 | -0.06 |
| PAACAGDMAD | AASPCSVVNDLR | THOP1_HUMAN | | | Thimet oligopeptidase; | -0.88 | 0.05 | 60.80 | -0.08 |
| | M VGVKPVGSDPDFQPELSGAGSR | TXNL1_HUMAN | | | Thioredoxin-like protein | 0.15 | 0.01 | 89.10 | 2.97 |
| | RTIYTTRISL | THIOM_HUMAN | | | Thioredoxin, | -0.19 | 0.02 | 71.50 | 2.84 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|-------------------------|-------------|-------------|------|--|---------------------------------|-----------------------|----------------------|-------|
| M | SPTPLFLSLPEAR | THOC1_HUMAN | | | THO complex subunit 1; | -0.52 | 0.03 | 44.70 | 0.55 |
| RLADFGVLHR | NELSGALTGLTR | SYTC_HUMAN | | | Threonine--tRNA ligase, cytoplasmic; | 1.96 | 0.11 | 36.70 | 7.61 |
| IKALKIHKNS | STYWEGKADMETLQR | SYTC_HUMAN | | | Threonine--tRNA ligase, | -1.09 | 0.07 | 28.70 | -2.07 |
| SMVLELRGLR | TIVTTLQDSIR | TSP1_HUMAN | | | Thrombospondin-1; | 1.15 | 0.10 | 40.10 | 5.64 |
| VFLFMHVCCT | NRIPESGGDNSVFDIFELTGAAR | TSP1_HUMAN | | | Thrombospondin-1; | -0.88 | 0.08 | 76.80 | 2.00 |
| LLLLCFFTSA | SQDLQVIDLLTVGESR | TSP3_HUMAN | | | Thrombospondin-3; | 4.63 | 0.90 | 90.60 | 2.55 |
| GAKGDFPTGK | SSFSITR | TR150_HUMAN | | | Thyroid hormone receptor- | 0.04 | 0.00 | 21.00 | 0.36 |
| RMGATPTPFK | STGDIAGTVVPETNKEPR | ZO2_HUMAN | | | Tight junction protein ZO- | 0.20 | 0.01 | 40.60 | 4.43 |
| GEGGAYTDNE | LDEPAEEPLVSSITR | ZO2_HUMAN | | | Tight junction protein ZO-2; | -0.34 | 0.03 | 51.40 | 4.20 |
| TRDNANRIIK | TTLQKEKPDFCFLEEDPGICR | TFPI1_HUMAN | | | Tissue factor pathway inhibitor; | 0.98 | 0.05 | 67.60 | 0.53 |
| IHARFRRGAR | SYQVICR | TPA_HUMAN | | | Tissue-type plasminogen activator; | 1.76 | 0.10 | 31.10 | 0.94 |
| ISKKTVRSIQ | EAPVSEDLVIR | TOIP1_HUMAN | | | Torsin-1A-interacting | 1.53 | 0.17 | 37.50 | 1.59 |
| SQTISKKTVR | SIQEAPVSEDLVIR | TOIP1_HUMAN | | | Torsin-1A-interacting protein 1; | -0.21 | 0.03 | 58.20 | 6.47 |
| LLGLVSAAAA | AWDLASLR | TOR2A_HUMAN | TOR2X_HUMAN | | Torsin-2A; | 2.69 | 0.19 | 29.30 | 2.81 |
| PSQMDVELVS | GSPVALSPQPR | TOX4_HUMAN | | | TOX high mobility group box family member 4; | 0.06 | 0.01 | 45.20 | 0.62 |
| M | QLTHQLDLFPECR | TPRKB_HUMAN | | | TP53RK-binding protein; | 0.51 | 0.01 | 44.40 | 1.05 |
| LELNQMRAFK | SSATGSVFTGKAVR | PRCM_HUMAN | | | Trans-L-3-hydroxyproline dehydratase; | 1.20 | 0.09 | 29.60 | 1.32 |
| RGGTRGQEPQ | MKETIMNQEKLAKLQAQVR | BTF3_HUMAN | | | Transcription factor | 1.08 | 0.08 | 35.40 | 0.80 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|--------------------------|-------------|------|------|--|---------------------------------|-----------------------|----------------------|------|
| TLPGGLLAPG | GNSMASGVGVGAGLGAGVNQR | SOX2_HUMAN | | | Transcription factor SOX- | 0.33 | 0.02 | 37.20 | 1.64 |
| FAQDVGRMFK | QFNKLTEDKADVQSIIGLQR | TIF1B_HUMAN | | | Transcription intermediary factor 1-beta; | 0.35 | 0.01 | 45.50 | 2.66 |
| TADSQPPVFK | VFPGSTTEDYNLIVIER | TIF1B_HUMAN | | | Transcription intermediary factor 1- | -0.37 | 0.01 | 55.70 | 3.22 |
| EGPETKPVLM | ALAEGPGAEGPR | TIF1B_HUMAN | | | Transcription | -0.43 | 0.02 | 37.20 | 0.52 |
| AASASASAAA | SSPAGGGAEALLEHCGVCR | TIF1B_HUMAN | | | Transcription intermediary factor 1- | -0.83 | 0.03 | 49.20 | 3.99 |
| LTADSQPPVF | KVFPGSTTEDYNLIVIER | TIF1B_HUMAN | | | Transcription | -1.00 | 0.02 | 67.80 | 3.53 |
| PSGSTSSGLE | VVAPEGTSAPGGPGTLDDSATICE | TIF1B_HUMAN | | | Transcription | -1.00 | 0.10 | 37.50 | 8.34 |
| EAAIGAPPTA | TEGPETKPVLMALAEGPGAEGPR | TIF1B_HUMAN | | | Transcription intermediary factor 1- | -1.14 | 0.03 | 73.10 | 2.99 |
| AAASASASAA | ASSPAGGGAEALLEHCGVCR | TIF1B_HUMAN | | | Transcription | -1.19 | 0.11 | 43.60 | 0.92 |
| EKRSTAPSAA | ASASASAAAASSPAGGGAEALLE | TIF1B_HUMAN | | | Transcription intermediary factor 1- | -1.40 | 0.07 | 95.90 | 4.35 |
| KRSTAPSAAA | SASASAAAASSPAGGGAEALLEH | TIF1B_HUMAN | | | Transcription intermediary factor 1- | -1.46 | 0.12 | 75.80 | 6.31 |
| RSTAPSAAAS | ASASAAAASSPAGGGAEALLEHC | TIF1B_HUMAN | | | Transcription intermediary factor 1- | -1.80 | 0.19 | 40.30 | 4.90 |
| QHLQSSRHRR | ALDTNYCFSSTEKNCCVR | TGFB1_HUMAN | | | Transforming growth | 1.21 | 0.11 | 35.30 | 3.27 |
| LALGPAATLA | GPAKSPYQLVLQHSR | BGH3_HUMAN | | | Transforming growth | -0.40 | 0.01 | 30.50 | 2.34 |
| EGKNMACVQR | TLMNLGGLAVAR | TAGL2_HUMAN | | | Transgelin-2; | 3.65 | 0.41 | 64.00 | 2.89 |
| HVGADLAALC | SEAALQAIR | TERA_HUMAN | | | Transitional endoplasmic reticulum ATPase; | -1.52 | 0.18 | 30.60 | 3.22 |
| YKVGDKIATR | KAYGQALAKLGHASDR | TKT_HUMAN | | | Transketolase; | 2.08 | 0.11 | 36.80 | 1.13 |
| KVGDKIATRK | AYGQALAKLGHASDR | TKT_HUMAN | | | Transketolase; | 0.57 | 0.05 | 32.70 | 4.91 |
| ATRNRTPFC | STFAAFFTR | TKT_HUMAN | | | Transketolase; | 0.38 | 0.02 | 30.60 | 4.43 |
| IIQEIYSIQI | SKKKILATPPQEDAPSVDIANIR | TKT_HUMAN | | | Transketolase; | 0.17 | 0.01 | 45.40 | 1.96 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|-------------------|-------------|------|------|---|---------------------------------|-----------------------|----------------------|------|
| KKILATPPQE | DAPSVDIANIR | TKT_HUMAN | | | Transketolase; | -0.26 | 0.01 | 39.70 | 3.32 |
| YEGGIGEAVS | SAVVGEPGIVTHLAVNR | TKT_HUMAN | | | Transketolase; | -1.14 | 0.05 | 49.90 | 4.90 |
| TRNRTVPFCS | TFAAFFTR | TKT_HUMAN | | | Transketolase; | -1.96 | 0.08 | 26.60 | 0.60 |
| YLPSVTPGLK | ASLLDPVPEVR | GCN1L_HUMAN | | | Translational activator | -0.92 | 0.05 | 35.90 | 2.78 |
| EIVLCGIQLV | NATIGVFCGDCR | T4S5_HUMAN | | | Transmembrane 4 L6 family member 5; | 5.38 | 0.67 | 25.40 | 0.43 |
| FLLGPRLVLA | ISFHLPINR | TMEDA_HUMAN | | | Transmembrane emp24 domain-containing protein 10; | 1.54 | 0.16 | 32.70 | 1.90 |
| MQGPAGNASR | GLPGGPPSTVASGAGR | TM110_HUMAN | | | Transmembrane protein | 6.34 | 0.38 | 27.20 | 2.98 |
| PSVVKRMPAM | LTGLCQGCGR | TMEM2_HUMAN | | | Transmembrane protein 2; | -1.52 | 0.13 | 38.70 | 0.32 |
| QVVFTSDPHK | SYLPVQFQSPDKAETQR | TMEM2_HUMAN | | | Transmembrane protein 2; | -2.88 | 0.21 | 37.80 | 4.21 |
| EAPAAVTSAQ | VIKPLIFVDPNR | TCOF_HUMAN | | | Treacle protein; | 0.59 | 0.02 | 23.90 | 1.46 |
| EPVWAIGTGK | TATPQQAQEVHEKLR | TPIS_HUMAN | | | Triosephosphate isomerase; | 1.21 | 0.08 | 33.20 | 3.49 |
| VHEKLRGWLK | SNVSDAVAQSTR | TPIS_HUMAN | | | Triosephosphate isomerase; | 0.94 | 0.08 | 59.90 | 2.22 |
| DVDGFLVGGA | SLKPEFVDIINAK | TPIS_HUMAN | | | Triosephosphate isomerase; | 0.91 | 0.05 | 27.10 | 2.46 |
| YEPVWAIGTG | KTATPQQAQEVHEKLR | TPIS_HUMAN | | | Triosephosphate isomerase; | -0.24 | 0.01 | 37.20 | 2.44 |
| SPGMIKDCGA | TWVVLGHSER | TPIS_HUMAN | | | Triosephosphate | -0.69 | 0.04 | 38.00 | 3.44 |
| RPPLGFLNPR | LYQQHGAGLFDVTR | TPP1_HUMAN | | | Tripeptidyl-peptidase 1; | 3.86 | 0.18 | 35.80 | 1.10 |
| EADRKYEEVA | RKLVIIEGDLER | TPM3_HUMAN | | | Tropomyosin alpha-3 chain; | 0.51 | 0.03 | 43.70 | 0.40 |
| FVDPWTVQTS | SAKGIDYDKLIVR | SYWC_HUMAN | | | Tryptophan--tRNA ligase, | 0.79 | 0.06 | 27.60 | 1.85 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|--------------------------|-------------|-------------|-------------|-------------------------|---------------------------------|-----------------------|----------------------|-------|
| VDEVVAGTYR | QLFHPEQLITGKEDAANNYAR | TBA1A_HUMAN | TBA1B_HUMAN | TBA1C_HUMAN | Tubulin alpha-1A chain; | 2.30 | 0.08 | 48.40 | 1.50 |
| QPDGQMPSDK | TIGGGDDSFNTFFSETGAGKHVPR | TBA1A_HUMAN | TBA1B_HUMAN | TBA1C_HUMAN | Tubulin alpha-1A chain; | 0.83 | 0.03 | 50.10 | 2.38 |
| GKHPRAVVF | DLEPTVIDEVR | TBA1A_HUMAN | TBA1B_HUMAN | TBA1C_HUMAN | Tubulin alpha-1A chain; | 0.78 | 0.07 | 52.50 | 0.68 |
| VVDEVVAGTY | RQLFHPEQLITGKEDAANNYAR | TBA1A_HUMAN | TBA1B_HUMAN | TBA1C_HUMAN | Tubulin alpha-1A chain; | 0.66 | 0.03 | 38.10 | 3.52 |
| VDWCPTGFKV | GINYQPPTVPPGGDLAKVQR | TBA1A_HUMAN | TBA1B_HUMAN | TBA1C_HUMAN | Tubulin alpha-1A chain; | 0.56 | 0.04 | 20.00 | 2.25 |
| FVDWCPTGFK | VGINYQPPTVPPGGDLAKVQR | TBA1A_HUMAN | TBA1B_HUMAN | TBA1C_HUMAN | Tubulin alpha-1A chain; | 0.42 | 0.03 | 43.70 | -1.50 |
| GAGKHVPRAV | FVDLEPTVIDEVR | TBA1A_HUMAN | TBA1B_HUMAN | TBA1C_HUMAN | Tubulin alpha-1A chain; | 0.28 | 0.01 | 43.80 | 3.59 |
| FEGPLNVDLI | EFQTNLVPYPR | TBA1A_HUMAN | TBA1B_HUMAN | TBA1C_HUMAN | Tubulin alpha-1A chain; | 0.20 | 0.01 | 43.80 | 2.29 |
| PTGFKVGINY | QPPTVPPGGDLAKVQR | TBA1A_HUMAN | TBA1B_HUMAN | TBA1C_HUMAN | Tubulin alpha-1A chain; | 0.13 | 0.01 | 22.10 | 1.33 |
| ETGAGKHVPR | AVFVDLEPTVIDEVR | TBA1A_HUMAN | TBA1B_HUMAN | TBA1C_HUMAN | Tubulin alpha-1A chain; | 0.04 | 0.00 | 66.90 | 5.87 |
| DEVVAGTYRQ | LFHPEQLITGKEDAANNYAR | TBA1A_HUMAN | TBA1B_HUMAN | TBA1C_HUMAN | Tubulin alpha-1A chain; | -0.29 | 0.01 | 38.90 | 1.36 |
| LTSRGSQQYR | ALTVPELTQQVFDAKNMMAACDP | TBB5_HUMAN | | | Tubulin beta chain; | 0.53 | 0.06 | 41.10 | 0.36 |
| GSDQLDLRI | SVYYNEATGGKYVPR | TBB5_HUMAN | | | Tubulin beta chain; | 0.48 | 0.05 | 29.80 | 2.31 |
| QSGAGNNWAK | GHYTEGAELVDSVLDVVR | TBB5_HUMAN | TBB2A_HUMAN | TBB2B_HUMAN | Tubulin beta chain; | 0.38 | 0.03 | 48.70 | 1.41 |
| EATGGKYVPR | AILVDLEPGTMDSVR | TBB2A_HUMAN | TBB2B_HUMAN | TBB3_HUMAN | Tubulin beta-2A chain; | 1.31 | 0.08 | 40.30 | 0.30 |
| AGNNWAKGHY | TEGAELVDSVLDVVR | TBB4B_HUMAN | TBB2A_HUMAN | TBB2B_HUMAN | Tubulin beta-4B chain; | 0.51 | 0.09 | 71.90 | 3.80 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|--------------------------|-------------|-------------|-------------|--|---------------------------------|-----------------------|----------------------|-------|
| GDSLQLERI | NVYYNEATGGKYVPR | TBB4B_HUMAN | | | Tubulin beta-4B chain; | 0.45 | 0.03 | 26.50 | 3.16 |
| SGGRYVRAV | LVDLEPGTMDSVR | TBB4B_HUMAN | TBB2A_HUMAN | TBB2B_HUMAN | Tubulin beta-4B chain; | 0.42 | 0.04 | 30.30 | -0.21 |
| EASGGRYVPR | AVLVDLEPGTMDSVR | TBB4B_HUMAN | TBB4A_HUMAN | TBB8_HUMAN | Tubulin beta-4B chain; | 0.38 | 0.02 | 63.90 | 5.31 |
| LKMASTFIGN | STAIQELFKR | TBB4B_HUMAN | TBB2A_HUMAN | TBB2B_HUMAN | Tubulin beta-4B chain; | 0.30 | 0.02 | 21.70 | 0.16 |
| GNNWAKGHYT | EGAELVDSVLDVVR | TBB4B_HUMAN | TBB2A_HUMAN | TBB2B_HUMAN | Tubulin beta-4B chain; | 0.28 | 0.04 | 55.70 | 5.40 |
| GRYVPRAVLV | DLEPGTMDSVR | TBB4B_HUMAN | TBB2A_HUMAN | TBB2B_HUMAN | Tubulin beta-4B chain; | 0.22 | 0.02 | 30.80 | 5.58 |
| GAGNNWAKGH | YTEGAELVDSVLDVVR | TBB4B_HUMAN | TBB2A_HUMAN | TBB2B_HUMAN | Tubulin beta-4B chain; | -0.37 | 0.05 | 48.20 | 4.11 |
| LTSRGSQQYR | ALTVPELTQQMFDAR | TBB6_HUMAN | | | Tubulin beta-6 chain; | 0.98 | 0.09 | 58.30 | 1.31 |
| RGPERRPAER | SSPGQTPEEGAQALAEFAALHGPA | TTL12_HUMAN | | | Tubulin--tyrosine ligase-like protein 12; | -0.16 | 0.01 | 37.30 | 8.82 |
| APFFYMPQQV | AYTLLWPLR | TTL12_HUMAN | | | Tubulin--tyrosine ligase- | -0.19 | 0.02 | 33.10 | 0.00 |
| PGSAASPRLR | EGPELSPDDPAGLLDLR | TNFI9_HUMAN | | | Tumor necrosis factor | 1.51 | 0.11 | 72.10 | 5.16 |
| ASPGSAASPR | LREGPELSPDDPAGLLDLR | TNFI9_HUMAN | | | Tumor necrosis factor ligand superfamily | 0.96 | 0.06 | 63.00 | 4.44 |
| GTAPCSRGS | WSADLDKCMDCASCR | TNR12_HUMAN | | | Tumor necrosis factor | -1.09 | 0.12 | 29.70 | 6.05 |
| CDEWGRRARR | GVEVAAGASSGGETR | TR19L_HUMAN | | | Tumor necrosis factor receptor superfamily member 19L; | 1.31 | 0.07 | 72.20 | 4.27 |
| STTAQPEQK | ASNLIQTYR | TNR21_HUMAN | | | Tumor necrosis factor receptor superfamily | -0.76 | 0.04 | 40.30 | 1.17 |
| QDISIKRLQR | LLQALEAPEGWGPTPR | TNF6B_HUMAN | | | Tumor necrosis factor receptor superfamily member 6B; | 6.03 | 0.94 | 84.70 | 4.25 |
| AALQLKLR | LTELLGAQDGALLVR | TNF6B_HUMAN | | | Tumor necrosis factor receptor superfamily | 2.35 | 0.15 | 89.30 | 2.32 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|-------------|---------------------------|-------------|------|------|---|---------------------------------|-----------------------|----------------------|-------|
| ALLPVPVAVRG | VAETPTYPW | TNF6B_HUMAN | | | Tumor necrosis factor receptor superfamily member 6B; | 1.70 | 0.02 | 23.70 | 1.91 |
| RAALQLKLRR | RLTELLGAQDGALLVR | TNF6B_HUMAN | | | Tumor necrosis factor receptor superfamily | 1.33 | 0.07 | 42.80 | -1.54 |
| ALQLKLRRRL | TELLGAQDGALLVR | TNF6B_HUMAN | | | Tumor necrosis factor receptor superfamily | 1.16 | 0.14 | 67.50 | 0.40 |
| TLSQAGQKTS | AALSTVGSISR | TPD54_HUMAN | | | Tumor protein D54; | 0.70 | 0.08 | 40.20 | -0.52 |
| DSAGQDINLN | SPNKGLSDSMTDVPVDTGVAAR | TPD54_HUMAN | | | Tumor protein D54; | 0.61 | 0.05 | 52.80 | 8.33 |
| PYEAVTPLTK | AADISLDNLVEGKR | TP53B_HUMAN | | | Tumor suppressor p53-binding protein 1; | 1.35 | 0.11 | 35.50 | 3.12 |
| AAAGPSDGLD | ASSPGNSFVGLR | TP53B_HUMAN | | | Tumor suppressor p53- | -1.24 | 0.06 | 42.70 | -0.08 |
| QIKINEVQTD | VGVDTKHQTLQGVAFPIR | TWF1_HUMAN | | | Twinfilin-1; | -1.46 | 0.04 | 35.90 | -1.51 |
| LQQIRINEVK | TEISVESKHQTLQGLAFPLQPEAQF | TWF2_HUMAN | | | Twinfilin-2; | -0.55 | 0.02 | 45.80 | 4.90 |
| SVLLPLGLRK | AHSGAQGLLAAQKAR | SYYM_HUMAN | | | Tyrosine--tRNA ligase, mitochondrial; | 0.38 | 0.04 | 35.70 | 3.45 |
| VPLAWCLALC | GWACMAPR | UFO_HUMAN | | | Tyrosine-protein kinase | 8.39 | 1.12 | 25.40 | 1.84 |
| HNAKGVTTSR | TATITVLPQQPR | UFO_HUMAN | | | Tyrosine-protein kinase receptor UFO; | 3.98 | 0.34 | 27.10 | 6.57 |
| ASCAWSGVAG | EEELQVIQPKSVLVAAGETATLR | SHPS1_HUMAN | | | Tyrosine-protein phosphatase non-receptor | -1.46 | 0.08 | 77.70 | 7.43 |
| | MVKLTAELIEQAAQYTNVAVR | RU2A_HUMAN | | | U2 small nuclear ribonucleoprotein A'; | -0.65 | 0.01 | 43.90 | 5.30 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|-------------------------|-------------|------|------|--|---------------------------------|-----------------------|----------------------|-------|
| VLEQRGRLQK | LVAKEIQAPASADIR | U3IP2_HUMAN | | | U3 small nucleolar RNA-interacting protein 2; | 0.24 | 0.02 | 33.20 | 3.41 |
| TARSLQYEYK | ANSNLVLQADR | U520_HUMAN | | | U5 small nuclear ribonucleoprotein 200 kDa helicase; | 0.46 | 0.05 | 55.20 | 1.38 |
| NKMKGYTLLS | EGIDEMVGHIYKPKTKETR | U520_HUMAN | | | U5 small nuclear ribonucleoprotein 200 | -0.52 | 0.03 | 30.50 | 2.98 |
| INKMKGYTLL | SEGIDEMVGHIYKPKTKETR | U520_HUMAN | | | U5 small nuclear ribonucleoprotein 200 | -0.52 | 0.02 | 48.50 | -0.12 |
| VKRQRHELLL | GAGSGPGAGQQQATPGALLQAGP | SNR40_HUMAN | | | U5 small nuclear ribonucleoprotein 40 kDa | -0.40 | 0.03 | 46.90 | 3.42 |
| GSGPGAGQQQ | ATPGALLQAGPPR | SNR40_HUMAN | | | U5 small nuclear ribonucleoprotein 40 kDa | -1.29 | 0.19 | 55.30 | 4.60 |
| MADDVDQQQ | TTNTVEEPLDLIR | LSM3_HUMAN | | | U6 snRNA-associated Sm-like protein LSM3; | -0.88 | 0.05 | 44.00 | 7.81 |
| QDGIAPRMFK | ALIGKGHPEFSTNR | UBP5_HUMAN | | | Ubiquitin carboxyl-terminal hydrolase 5; | 1.10 | 0.05 | 28.30 | 3.15 |
| LFAQTVRVLK | KINKPGNMIMAFSNLAER | UBE4A_HUMAN | | | Ubiquitin conjugation factor E4 A; | -0.96 | 0.06 | 24.80 | 3.74 |
| SVSESLDEFD | YSVAEISR | UBE4A_HUMAN | | | Ubiquitin conjugation factor E4 A; | -1.09 | 0.09 | 25.60 | 2.61 |
| YDEAIMAQQD | RIQQEIAVQNPLVSR | OTUB1_HUMAN | | | Ubiquitin thioesterase | -6.06 | 0.00 | 44.00 | 1.10 |
| TKIFTASNVS | SVPLPAENVTTITAGQR | UBP2L_HUMAN | | | Ubiquitin-associated | 1.37 | 0.09 | 64.70 | 3.02 |
| DPKFVERTLR | LAGTQPLEVLEAVQR | UBA1_HUMAN | | | Ubiquitin-like modifier-activating enzyme 1; | 1.84 | 0.10 | 79.90 | 0.97 |
| SVQVPEFTPK | SGVKIHVSDQELQSANASVDDSR | UBA1_HUMAN | | | Ubiquitin-like modifier-activating enzyme 7; | 0.37 | 0.03 | 51.10 | 3.96 |
| GSALLYAAGW | SPEKQAQHLPLR | UBA7_HUMAN | | | Ubiquitin-like modifier-activating enzyme 7; | 6.67 | 0.82 | 31.80 | -2.46 |
| | MIEVVCNDR | UBL5_HUMAN | | | Ubiquitin-like protein 5; | 0.81 | 0.07 | 30.10 | 0.17 |
| GAPKRRRPAR | SIFDGFR | UBXN7_HUMAN | | | UBX domain-containing | 0.89 | 0.03 | 27.30 | 4.14 |
| APDGNGGLYR | ALAAQNIVEDMEQR | UAP1_HUMAN | | | UDP-N-acetylhexosamine pyrophosphorylase; | 0.85 | 0.07 | 72.30 | 1.48 |
| SGGVNLFAND | GSFLELFKR | CS043_HUMAN | | | Uncharacterized protein C19orf43; | -1.34 | 0.10 | 21.90 | 0.34 |
| DQSLLLTLRH | LHSVLEELR | CT202_HUMAN | | | Uncharacterized protein C20orf202; | 7.31 | 0.60 | 31.00 | 1.69 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|--------------|--------------------------|-------------|------|------|--|---------------------------------|-----------------------|----------------------|-------|
| SNKIAEMMFG | FVLDIRPER | CE025_HUMAN | | | Uncharacterized protein | 0.28 | 0.03 | 27.00 | 2.44 |
| QFSAGRWGS | AAVSAAAAAATR | CI041_HUMAN | | | UPF0586 protein | -1.65 | 0.10 | 47.20 | 5.35 |
| FSAGRWGSAA | AVSAAAAAATR | CI041_HUMAN | | | UPF0586 protein | -2.24 | 0.11 | 44.20 | 1.01 |
| EVQFSAGRWG | SAAAVSAAAAAATR | CI041_HUMAN | | | C9orf41; UPF0586 protein | -2.46 | 0.27 | 76.30 | 0.90 |
| QDLSKAMSQD | GASQFQEVIR | UGPA_HUMAN | | | UTP--glucose-1-phosphate | -1.29 | 0.16 | 47.10 | 3.51 |
| HGSVQESQVS | EQPATEAAGENPLEFLR | RD23A_HUMAN | | | UV excision repair | -0.88 | 0.05 | 90.10 | 6.82 |
| AATTTATTTT | TSSGGHPLEFLR | RD23B_HUMAN | | | UV excision repair | 0.66 | 0.03 | 32.90 | 3.14 |
| ATTTATTTT | SSGGHPLEFLR | RD23B_HUMAN | | | protein RAD23 homolog | 0.13 | 0.01 | 33.80 | 2.27 |
| AVAAAAATTT | ATTTTTSSGGHPLEFLR | RD23B_HUMAN | | | UV excision repair | -0.21 | 0.02 | 45.70 | 1.05 |
| VAAAAATTTA | TTTTTSSGGHPLEFLR | RD23B_HUMAN | | | protein RAD23 homolog | -0.26 | 0.02 | 34.70 | -0.34 |
| LRAMRGIVNG | AAPELVPVPTGGPAVGAR | VATB2_HUMAN | | | V-type proton ATPase | -0.58 | 0.03 | 56.20 | 1.20 |
| SLAAAAAAAA | AEQQVPLVLWSSDR | VAS1_HUMAN | | | V-type proton ATPase subunit S1; | 0.91 | 0.06 | 58.60 | 3.62 |
| LAAAAAAAA | EQQVPLVLWSSDR | VAS1_HUMAN | | | V-type proton ATPase subunit S1; | 0.60 | 0.04 | 58.60 | 3.97 |
| FLSLAAAAAAAA | AAAEQQVPLVLWSSDR | VAS1_HUMAN | | | V-type proton ATPase | 0.59 | 0.03 | 71.40 | 4.82 |
| LSLAAAAAAAA | AAEQVPLVLWSSDR | VAS1_HUMAN | | | V-type proton ATPase subunit S1; | 0.28 | 0.02 | 58.70 | 3.70 |
| RPHVKKATPR | MIGLTVGFDDK | VP13A_HUMAN | | | Vacuolar protein sorting-associated protein 13A; | 9.67 | 1.50 | 23.40 | 8.57 |
| | MVLESVVADLLNR | VP13C_HUMAN | | | Vacuolar protein sorting- | -0.16 | 0.01 | 55.00 | 1.32 |
| VNKKFSVRYF | LNLVLDDEDR | VP26A_HUMAN | | | Vacuolar protein sorting- | -6.06 | 0.00 | 30.60 | 4.44 |
| KNSTTLPRMK | SSSVTTSETQPCTPSSSDYSDLQR | VASP_HUMAN | | | Vasodilator-stimulated | 0.17 | 0.01 | 64.30 | 2.70 |
| PRPGPARRPY | AGGAAQLALDKSDSHPSDALTR | ACADV_HUMAN | | | Very long-chain specific | 0.60 | 0.04 | 42.60 | -0.09 |
| LRPSTSRSLY | ASSPGGVYATR | VIME_HUMAN | | | Vimentin; | 1.63 | 0.07 | 29.60 | 5.21 |
| LPLVDTHSKR | LLIKTVETR | VIME_HUMAN | | | Vimentin; | 0.59 | 0.05 | 20.60 | 3.08 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|------------------------|-------------|------------|------|---|---------------------------------|-----------------------|----------------------|-------|
| NLQEAEEWYK | SKFADLSEAANR | VIME_HUMAN | | | Vimentin; | 0.24 | 0.02 | 40.90 | 3.92 |
| FLEQQNKILL | AELEQLKGQKSR | VIME_HUMAN | | | Vimentin; | 0.13 | 0.01 | 24.80 | 1.76 |
| QEAEWYKSK | FADLSEAANR | VIME_HUMAN | | | Vimentin; | 0.04 | 0.00 | 32.20 | 0.89 |
| LLQDSVDFSL | ADAINTEFKNTR | VIME_HUMAN | | | Vimentin; | -0.09 | 0.01 | 27.30 | -1.66 |
| GVRLLQDSVD | FSLADAINTEFKNTR | VIME_HUMAN | | | Vimentin; | -0.11 | 0.01 | 23.80 | -1.22 |
| QAKQESTEYR | RQVQSLTCEVDALKGTNESLER | VIME_HUMAN | | | Vimentin; | -0.80 | 0.04 | 66.30 | 0.46 |
| EYRRQVQSLT | CEVDALKGTNESLER | VIME_HUMAN | | | Vimentin; | -0.83 | 0.09 | 36.40 | 4.41 |
| ESTEYRRQVQ | SLTCEVDALKGTNESLER | VIME_HUMAN | | | Vimentin; | -1.00 | 0.08 | 28.70 | 4.88 |
| DKVRFLEQQN | KILLAELEQLKGQKSR | VIME_HUMAN | | | Vimentin; | -1.19 | 0.05 | 27.90 | 5.12 |
| VRLQDSVDF | SLADAINTEFKNTR | VIME_HUMAN | | | Vimentin; | -1.59 | 0.14 | 34.30 | 3.52 |
| QEQHVQIDVD | VSKPDLTAALR | VIME_HUMAN | | | Vimentin; | -1.87 | 0.07 | 36.50 | 1.69 |
| QDSVDFSLAD | AINTEFKNTR | VIME_HUMAN | | | Vimentin; | -2.05 | 0.17 | 22.20 | 5.51 |
| EQHVQIDVDV | SKPDLTAALR | VIME_HUMAN | DESM_HUMAN | | Vimentin; | -2.34 | 0.12 | 33.20 | 4.64 |
| M | KLTDSVLR | WDR82_HUMAN | | | WD repeat-containing | -0.69 | 0.07 | 33.70 | 3.39 |
| WQQHQGLLPP | GMTIDLFR | SMU1_HUMAN | | | WD40 repeat-containing | -1.00 | 0.10 | 23.90 | -1.01 |
| PPPAPQPQAR | SRLNATASLEQER | WFS1_HUMAN | | | Wolframin; | -0.34 | 0.04 | 33.80 | 1.59 |
| TKIPNPRFQR | LFQCLLHR | XRCC5_HUMAN | | | X-ray repair cross-complementing protein 5; | 4.35 | 0.33 | 24.20 | 1.97 |
| EQGGAHFSVS | SLAEGSVTSVGSVNPAENFR | XRCC5_HUMAN | | | X-ray repair cross-complementing protein 5; | -0.46 | 0.04 | 84.70 | 6.18 |
| GGAHFSVSSL | AEGSVTSVGSVNPAENFR | XRCC5_HUMAN | | | X-ray repair cross-complementing protein 5; | -0.80 | 0.08 | 63.40 | 3.23 |
| AHFSVSSLAE | GSVTSVGSVNPAENFR | XRCC5_HUMAN | | | X-ray repair cross-complementing protein 5; | -1.14 | 0.10 | 84.80 | 2.17 |
| ALAILLLQGL | VVWSFSGLEEDAGEKGR | XYLT2_HUMAN | | | Xylosyltransferase 2; | 0.66 | 0.05 | 24.00 | 3.56 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|---------------------------|-------------|-------------|------|--|---------------------------------|-----------------------|----------------------|-------|
| HSSPASLQLG | AVSPGTLTPTGVVSGPAATPTAQHI | YAP1_HUMAN | | | Yorkie homolog; | 0.17 | 0.01 | 68.90 | 5.07 |
| STDFSSSSQE | AFAASAVGSGERR | ZBT22_HUMAN | | | Zinc finger and BTB | -1.34 | 0.07 | 27.50 | -0.08 |
| ILKTLRQQTS | SRPPASVGE LSSSGLGDPR | ZC3H4_HUMAN | | | Zinc finger CCCH | -0.88 | 0.05 | 40.50 | 4.57 |
| TLPAARSSLG | SLQTPEAVTTR | ZCCHV_HUMAN | | | domain-containing protein | 0.76 | 0.05 | 39.60 | 3.41 |
| TPSPDQISHR | ASLEDAPVDDLTR | ZCCHV_HUMAN | | | Zinc finger CCCH-type | 0.56 | 0.06 | 44.40 | 5.64 |
| IECGQAFIQK | AHLIVHQR | ZN175_HUMAN | | | Zinc finger CCCH-type | -9.97 | 0.00 | 26.20 | 5.95 |
| RGGPSRRAPR | AAQPPAQPCQLCGR | ZN428_HUMAN | | | antiviral protein 1; | 0.56 | 0.11 | 41.00 | 2.27 |
| ISASVAVKQS | SVTQVTEQSPKVQSR | ZN638_HUMAN | | | Zinc finger protein 175; | 1.42 | 0.10 | 43.10 | 3.52 |
| PARSPPLQLS | EAELLNQLQR | ZN646_HUMAN | | | Zinc finger protein 428; | -0.29 | 0.03 | 32.70 | 5.87 |
| IVKNTVCPEQ | SEALAGGSAGDGAQAAGVTKEGP | ZN687_HUMAN | | | Zinc finger protein 638; | 0.24 | 0.02 | 55.30 | -0.15 |
| LKKEGLISQD | GSSLEALLR | REQU_HUMAN | | | Zinc finger protein 646; | 3.71 | 0.23 | 40.50 | 0.82 |
| RNSPDVSYER | SIKCEKNGNLK | FOG2_HUMAN | | | Zinc finger protein 687; | 1.96 | 0.14 | 27.50 | 7.04 |
| TLAEKSRGLF | SANDWQCKTCSNVNWAR | ZRAB2_HUMAN | | | Zinc finger protein ubi- d4; | -0.58 | 0.06 | 36.90 | 3.23 |
| LRHARWFQAR | ASGLQPCVIVIR | ZFR2_HUMAN | | | Zinc finger Ran-binding | -0.02 | 0.00 | 32.60 | 1.94 |
| VTPASLAALQ | SDVQPVGHDYVEEVR | ZFR_HUMAN | | | domain-containing protein | -0.14 | 0.01 | 61.80 | 2.10 |
| SEPVTASLA | ALQSDVQPVGHDYVEEVR | ZFR_HUMAN | | | Zinc finger RNA-binding | -0.21 | 0.02 | 46.90 | 5.01 |
| SLELGLQVMR | MTLSTLNWRR | ZSWM5_HUMAN | ZSWM6_HUMAN | | Zinc finger RNA-binding | 0.42 | 0.02 | 19.70 | 2.82 |
| EGELRHTRKR | EAPHVKNNAIISLR | S39AA_HUMAN | | | protein; | 2.68 | 0.16 | 35.70 | 1.17 |
| LLEMCVSGDL | VCEVDLGDLSPEGR | ZADH2_HUMAN | | | Zinc finger SWIM | -6.06 | 0.00 | 24.00 | -2.15 |
| QVQLHVQSQT | QPVSLANTQPR | ZYX_HUMAN | | | domain-containing protein | 0.56 | 0.04 | 42.60 | 6.53 |
| YYKMKGDYHR | YLAEFATGNDR | 1433E_HUMAN | | | Zinc transporter ZIP10; | 3.21 | 0.21 | 41.00 | 9.33 |
| | | | | | Zinc-binding alcohol dehydrogenase domain- containing protein 2; | | | | |
| | | | | | Zyxin; | | | | |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log ₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------|------------------|-------------|------|------|---------------|---------------------------------|-----------------------|----------------------|-------|
| SEIQDRCCRK | AALLDQALSAR | MACF4_HUMAN | | | | 2.96 | 0.13 | 30.20 | 0.63 |
| EKKGEKKEKK | QSIAGSADSKPIDVSR | AIMP1_HUMAN | | | | 1.05 | 0.08 | 37.90 | -0.22 |

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------------|--------------|-------------|-------------|-------------|----------------------|--|--------------------------------------|---------------------------------|------------|
|------------------|--------------|-------------|-------------|-------------|----------------------|--|--------------------------------------|---------------------------------|------------|

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------------|--------------|-------------|-------------|-------------|----------------------|--|--------------------------------------|---------------------------------|------------|
|------------------|--------------|-------------|-------------|-------------|----------------------|--|--------------------------------------|---------------------------------|------------|

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------------|--------------|-------------|-------------|-------------|----------------------|--|--------------------------------------|---------------------------------|------------|
|------------------|--------------|-------------|-------------|-------------|----------------------|--|--------------------------------------|---------------------------------|------------|

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------------|--------------|-------------|-------------|-------------|----------------------|--|--------------------------------------|---------------------------------|------------|
|------------------|--------------|-------------|-------------|-------------|----------------------|--|--------------------------------------|---------------------------------|------------|

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------------|--------------|-------------|-------------|-------------|----------------------|--------------------------------------|------------------------------|-----------------------------|------------|
|------------------|--------------|-------------|-------------|-------------|----------------------|--------------------------------------|------------------------------|-----------------------------|------------|

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| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------------|--------------|-------------|-------------|-------------|----------------------|--|--------------------------------------|---------------------------------|------------|
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Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------------|--------------|-------------|-------------|-------------|----------------------|--------------------------------------|------------------------------|-----------------------------|------------|
|------------------|--------------|-------------|-------------|-------------|----------------------|--------------------------------------|------------------------------|-----------------------------|------------|

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------------|--------------|-------------|-------------|-------------|----------------------|--------------------------------------|------------------------------|-----------------------------|------------|
|------------------|--------------|-------------|-------------|-------------|----------------------|--------------------------------------|------------------------------|-----------------------------|------------|

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------------|--------------|-------------|-------------|-------------|----------------------|--|--------------------------------------|---------------------------------|------------|
|------------------|--------------|-------------|-------------|-------------|----------------------|--|--------------------------------------|---------------------------------|------------|

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------------|--------------|-------------|-------------|-------------|----------------------|--------------------------------------|------------------------------|-----------------------------|------------|
|------------------|--------------|-------------|-------------|-------------|----------------------|--------------------------------------|------------------------------|-----------------------------|------------|

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------------|--------------|-------------|-------------|-------------|----------------------|--------------------------------------|------------------------------|-----------------------------|------------|
|------------------|--------------|-------------|-------------|-------------|----------------------|--------------------------------------|------------------------------|-----------------------------|------------|

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------------|--------------|-------------|-------------|-------------|----------------------|--|--------------------------------------|---------------------------------|------------|
|------------------|--------------|-------------|-------------|-------------|----------------------|--|--------------------------------------|---------------------------------|------------|

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------------|--------------|-------------|-------------|-------------|----------------------|--|--------------------------------------|---------------------------------|------------|
|------------------|--------------|-------------|-------------|-------------|----------------------|--|--------------------------------------|---------------------------------|------------|

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------------|--------------|-------------|-------------|-------------|----------------------|--------------------------------------|------------------------------|-----------------------------|------------|
|------------------|--------------|-------------|-------------|-------------|----------------------|--------------------------------------|------------------------------|-----------------------------|------------|

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------------|--------------|-------------|-------------|-------------|----------------------|--|--------------------------------------|---------------------------------|------------|
|------------------|--------------|-------------|-------------|-------------|----------------------|--|--------------------------------------|---------------------------------|------------|

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------------|--------------|-------------|-------------|-------------|----------------------|--------------------------------------|------------------------------|-----------------------------|------------|
|------------------|--------------|-------------|-------------|-------------|----------------------|--------------------------------------|------------------------------|-----------------------------|------------|

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------------|--------------|-------------|-------------|-------------|----------------------|--------------------------------------|------------------------------|-----------------------------|------------|
|------------------|--------------|-------------|-------------|-------------|----------------------|--------------------------------------|------------------------------|-----------------------------|------------|

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------------|--------------|-------------|-------------|-------------|----------------------|--|--------------------------------------|---------------------------------|------------|
|------------------|--------------|-------------|-------------|-------------|----------------------|--|--------------------------------------|---------------------------------|------------|

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------------|--------------|-------------|-------------|-------------|----------------------|--------------------------------------|------------------------------|-----------------------------|------------|
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Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
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Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------------|--------------|-------------|-------------|-------------|----------------------|--|--------------------------------------|---------------------------------|------------|
|------------------|--------------|-------------|-------------|-------------|----------------------|--|--------------------------------------|---------------------------------|------------|

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------------|--------------|-------------|-------------|-------------|----------------------|--------------------------------------|------------------------------|-----------------------------|------------|
|------------------|--------------|-------------|-------------|-------------|----------------------|--------------------------------------|------------------------------|-----------------------------|------------|

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------------|--------------|-------------|-------------|-------------|----------------------|--------------------------------------|------------------------------|-----------------------------|------------|
|------------------|--------------|-------------|-------------|-------------|----------------------|--------------------------------------|------------------------------|-----------------------------|------------|

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------------|--------------|-------------|-------------|-------------|----------------------|--|--------------------------------------|---------------------------------|------------|
|------------------|--------------|-------------|-------------|-------------|----------------------|--|--------------------------------------|---------------------------------|------------|

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------------|--------------|-------------|-------------|-------------|----------------------|--------------------------------------|------------------------------|-----------------------------|------------|
|------------------|--------------|-------------|-------------|-------------|----------------------|--------------------------------------|------------------------------|-----------------------------|------------|

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------------|--------------|-------------|-------------|-------------|----------------------|--------------------------------------|------------------------------|-----------------------------|------------|
|------------------|--------------|-------------|-------------|-------------|----------------------|--------------------------------------|------------------------------|-----------------------------|------------|

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------------|--------------|-------------|-------------|-------------|----------------------|--|--------------------------------------|---------------------------------|------------|
|------------------|--------------|-------------|-------------|-------------|----------------------|--|--------------------------------------|---------------------------------|------------|

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------------|--------------|-------------|-------------|-------------|----------------------|--------------------------------------|------------------------------|-----------------------------|------------|
|------------------|--------------|-------------|-------------|-------------|----------------------|--------------------------------------|------------------------------|-----------------------------|------------|

Table S6

| Non-prime | Prime | Id 1 | Id 2 | Id 3 | Protein (Id1) | Fold-change (log₂) | Fc standard deviation | X! Tandem hyperscore | ppm |
|------------------|--------------|-------------|-------------|-------------|----------------------|--------------------------------------|------------------------------|-----------------------------|------------|
|------------------|--------------|-------------|-------------|-------------|----------------------|--------------------------------------|------------------------------|-----------------------------|------------|