

Fig. 1: Summary of S-nitrosoprotein labeling and detection approaches. A protein is indicated schematically with cysteines in the thiol, disulfide, and nitrosothiol states. First, free thiols (-SH) are rendered as inactive by methylthiolation with methanethiosulfonate (MMTS). Second, nitrosothiols (-SNO) are selectively reduced with ascorbate and converted to -SH. Third, the converted -SH is labeled with the thiol-modifying reagents, including biotin-HPDP, MTSEA-Texas Red or Cydye fluor. Biotin-labeled nitrosoproteins are detected by immunoblotting with an anti-biotin antibody or captured by avidin and then analyzed by specific antibody against each protein of interest. MTSEA-Texas Red labeled intact cells can be visualized by fluorescence microscopy. Cydye fluor (Cy3 and Cy5) labeling coupled with 2D-DIGE can be used for proteomic analysis and nitrosoproteins identification by mass spectrometry.

Fig. 1

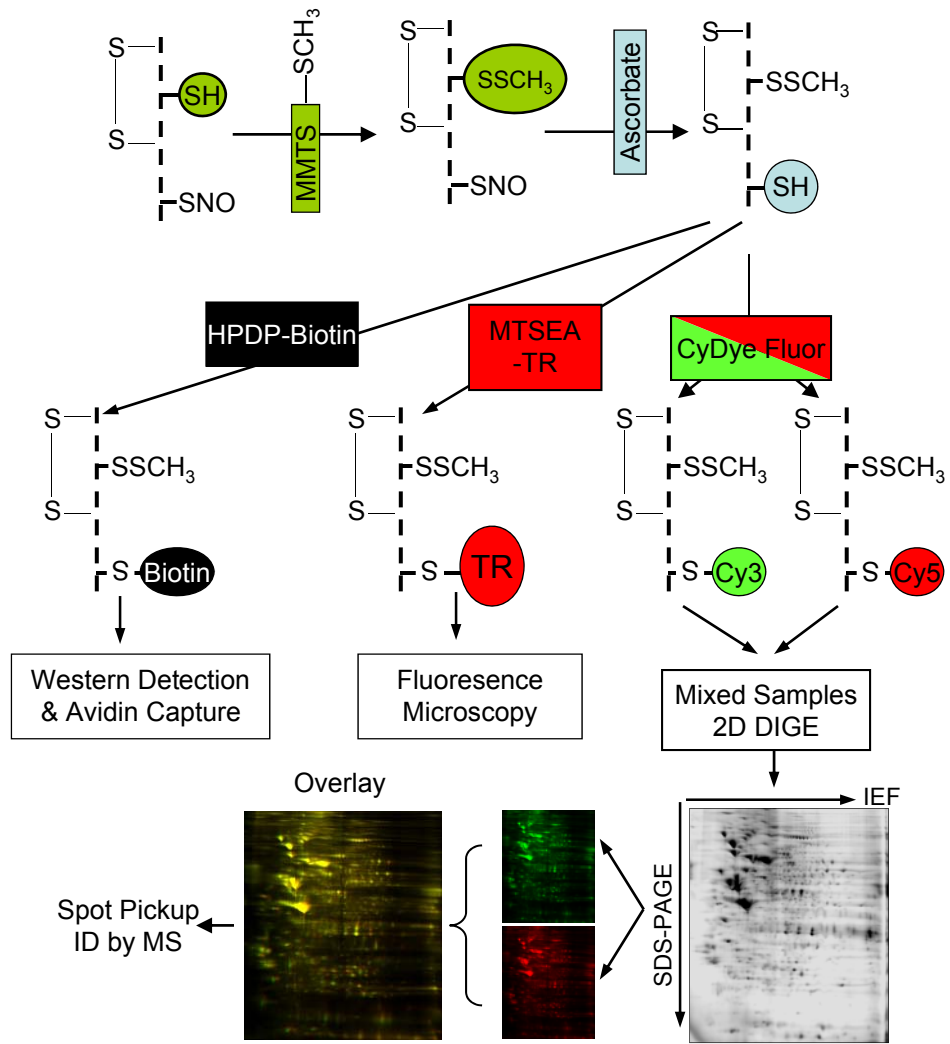


Fig. 2: Cyde switch, two dimensional fluorescence difference gel electrophoresis (2D-DIGE) analysis of nitrosoproteins by E2 in human umbilical vein endothelial cells (HUVEC). As a supplement for figure 6 and table 1, black and white images shown fluorescent signals from the red and green channels of all three experiments are shown. The spots circled and numbered represents 58 nitrosoproteins as listed in table 1. Ratios (E2/control) in signal intensities for each spot were calculated for statistical analysis.

Fig. 2

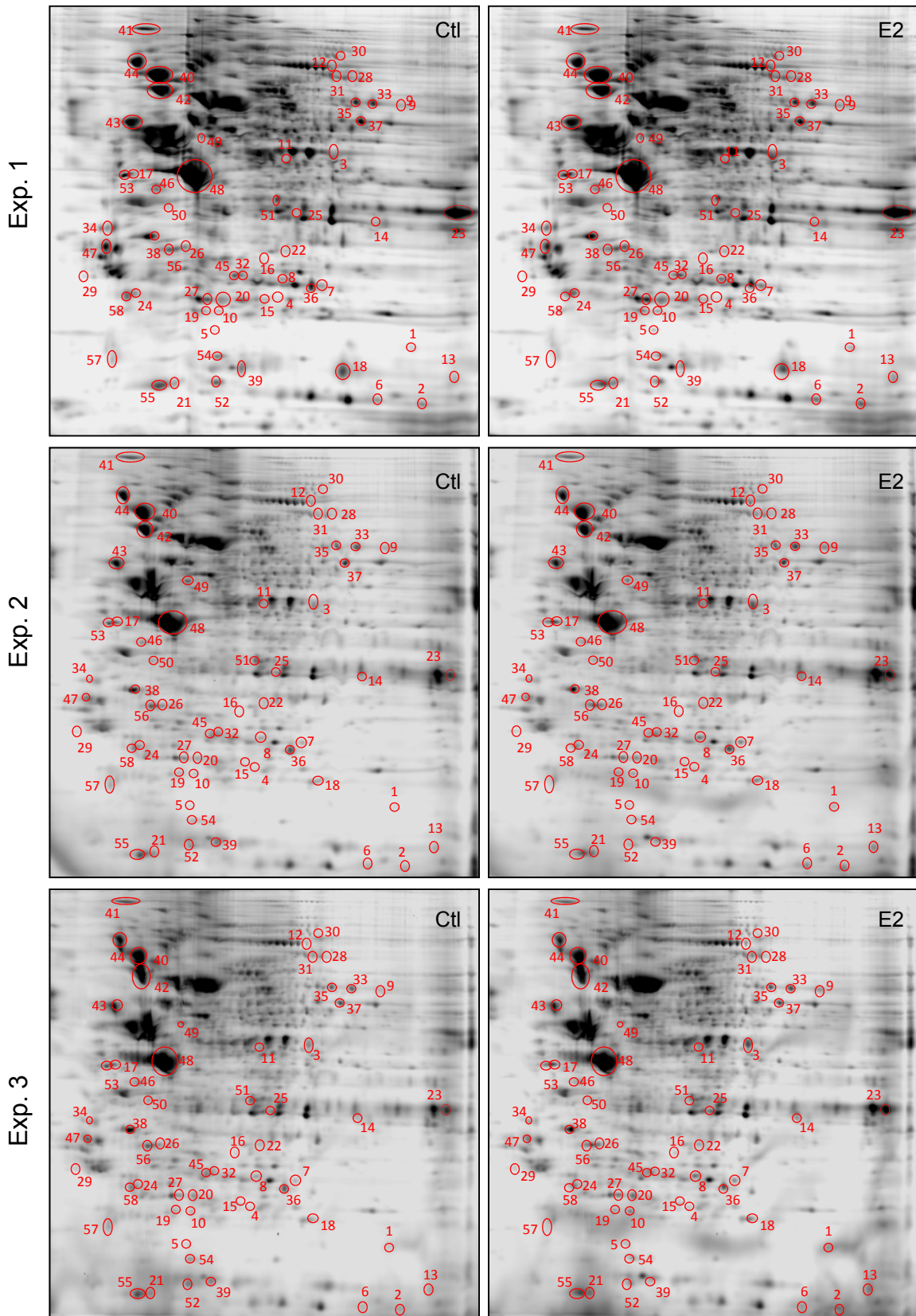


Table 1: Matched Peptide list in protein identification via Matrix assisted laser desorption/ionization-time of flight (MALDI-TOF)/tandam mass spectrometry

Spot #., Protein Name	# Pep Matched	Peptides Matched
1. Ubiquitin C (UBC)	5	EGIPPDQQR ESTLHLVLR TLDYNIQK IQDKEGIPPDQQR TITLEVEPSDTIENVK
2. Peptidylprolyl isomerase A (PPIA)	9	VSFELFADK FEDENFILK EGMNIVEAMER GFGYKGSFHR VSFELFADKVPK VKEGMNIVEAMER IIPGFMCQGGDFTR SIYGEKFEDENFILK VNPTVFFDIAVDGEPLGR
3. Enolase 1 (ENO1)	13	SGKYDLDFK IGAEVYHNLK LMIEMDGTENK GNPTVEVDLFTSK YISPDQLADLYK LAQANGWGVMSHR VVIGMDVAASEFFR AAVPSGASTGIYEALER LAMQEFMILPVGAANFR DATNVGDEGGFAPNILENK FTASAGIQVVGDDLTVTNPK DYPVVSIEDPFDQDDWGAWQK HIADLAGNSEVILPVPFNVINGGSHAGNK
4. Proteasome (prosome, macropain) subunit, beta type, 3 (PSMB3)	7	DAVSGMGVIVHIEK FGIQAQMVTTDFQK FGPYTEPVIAGLDPK RFGIQAQMVTTDFQK RFGPYTEPVIAGLDPK DAVSGMGVIVHIEKDK LYIGLAGLATDVQTVQQR
5. Adenine phosphoribosyl Transferase (APRT)	6	IDYIAGLDSR DISPVLKDPASFR SFPDFPTPGVVFR LAPVPFFSLLQYE AELEIQKDALEPGQR LPGPTLWASYSLEYGK
6. Peptidylprolyl isomerase A (PPIA)	9	VSFELFADK FEDENFILK EGMNIVEAMER GFGYKGSFHR VSFELFADKVPK VKEGMNIVEAMER IIPGFMCQGGDFTR SIYGEKFEDENFILK VNPTVFFDIAVDGEPLGR
7. Triosephosphate isomerase 1 (TPI1)	14	FFVGGNWK KFFVGGNWK SNVSDAVAQSTR FFVGGNWKMNGR QSLGELIGTLNAAK HVFGESEDELIGQK TATPQQAQEVHEK DCGATWVVLGHSER KQSLGELIGTLNAAK VVLAYEPVWAIGTGK RHVFGESEDELIGQK VTNGAFTGEISPGMIK VPADTEVVCAPPTAYIDFAR

		ELASQPVDVGGFLVGGASLKPEFVDIINAK
8.Peroxiredoxin 6 (PRDX6)	13	VVVFVFGPDK AAKLAPEFAK RVATPVDWK LPFPIDDR VVVFVFGPDKK LSILYPATTGR VVISLQLTAEKR DFTPVCTTELGR DGDSVMVLPTIPEEEAK ELAILLGMMLDPAEKDEK LIALSIDSVEDHLAWSK FHDFLGDWSGILFHSR PGGLLLGDVAPNFEANTTVGR
9.Transketolase (TKT)	18	KAYGQALAK HQPTAIIAK NSTFSEIFK ESWHGKPLPK NSTFSEIFKK ISSDLDGHPVPK LDNLVAILDINR KISSDLDGHPVPK VLDPFTIKPLDR MFGIDRDAIAQAVR TVPFCSTFAAFFTR SVPTSTVFYPSDGVATEK GITGVEDKESWHGKPLPK ILATPPQEDAPSVDIANIR LGQSDPAPLQHQMIDIYQK TSRPNIAIYNNNEDFQVGQAK SKDDQVTIGAGVTLHEALAAELLK ILTVEDHYEGGIGEAVSSAVVGEPIGIVTHLA VNR
10.Peroxiredoxin 2 (PRDX2)	7	IGKPAPDFK ATAVVDGAFK LSEYGVVK RLSEYGVVK QITVNDLPVGR EGGLGPLNIPLADVTR KEGGLGPLNIPLADVTR
11.Eukaryotic translation elongation factor 1 gamma (EEF1G)	16	QAFPNTNR QVLEPSFR STFVLDEFK ILGLLDAYLK AKDPFAHLPK STFVLDEFKR RILGLLDAYLK ALIAAQYSGAQVR LDPGSEETQTLVR DGWSLWYSEYR WFLTCINQPQFR KLDPGSEETQTLVR EYFSWEGAFQHVVK VLSAPPHFHGQTNR YSNEDTSLVALPYWEHFDK GQELAFPLSPDWQVDYESYTWR
12.Eukaryotic translation elongation factor (EEF2)	21	GGGQIIPAR GEGQLGPAER GPLMMYISK VFDAIMNFK QFAEMYVAK VNFTVDQIR VFSGLVSTGLK YEWVDAEAR EDLYLKPIQR NMSVIAHVDHGK DSVVAGFQWATK KEDLYLKPIQR EGIPALDNFLDKL

		TGTITTFEHAHNMR AYLPVNESFGFTADLR GHVFEEQVAGTPMFVVK RGHVFEESQVAGTPMFVVK ARPPFDGLAEDIDKGEVSAR STAISLFYELSENDLNFILK ALLELQLEPEELYQTFQR DGAGFLINLIDSPGHVDFSSSEVTAALR
13.Cofilin 1(CFL1)	7	MLPDKDCR YALYDATYETK LGGSAVISLEGKPL HELQANCYEEVKDR KEDLVFIFWAPESAPLK EILVGDVGGQTVDDPYATFVK NIILEEGKEILVGDVGGQTVDDPYATFVK
14.Annexin A2 (ANXA2)	17	WISIMTER AYTNFDAER STVHEILCK QDIAFAYQR TPAQYDASELK TNQELQEINR DIISDTSGDFRK SLYYIQQDTK SYSPYDMLESIR GVDEVTIVNILTNR SYSPYDMLESIRK SALSGHLETVILGLLK TDLEKDIISDTSGDFR LSLEGDHSTPPSAYGSVK AEDGGSVIDYELIDQDAR RAEDGGSVIDYELIDQDAR AYTNFDAERDALNIETAIK
15.Parkinson disease (autosomal recessive, early onset) 7 (PARK7)	7	EILKEQENR VEKDGILTSR MMNGGHYTYSENK GAEEMETVIPVDVMR MMNGGHYTYSENKVEK GPGTSFEFALAIVEALNGK EGPYDVVVLPGGNLGAQNLSESAVK
16.Glutathione S-transferase omega 1 (GSTO1)	11	MILEFSK LEEVLTKK VPSLVGSFIR HEVININLK LLPDDPYEK LKLWMAAMK NKPEWFFK KLLPDDPYEK GSAPPGPVPEGSIR EDYAGLKEEFR EFTKLEEVLTNK
17.Lectin, galactoside-binding, soluble, 3 (LGALS3)	10	SDGIYIINLK FAAATGATPIAGR KSDGIYIINLK GAHSVGLMWWMLAR FTPGFTFNQQAQAFR AIVAIENPADVSVISSR EHPWEVMPDLYFYR FTPGFTFNQQAQAFREPR FLAAGTHLGGTNLDFQMEQYIYK EHPWEVMPDLYFYRDPPEIEK
18.Transgelin 2 (TAGLN2)	12	DVGRPQPGR IQASTMAFK ENFQNWLK KDVGRPQPGR NVIGLQMGNTNR TLMNLGGLAVAR NFSNQLQEGK GASQAGMTGYGMPR DDGLFSGDPNWFVK QMEQISQFLQAAER

		YGINTTDFQTVDLWEGK DGTVLCELINALYPEGQAPVK
19.RNA binding motif protein 8A (RBM8A)	5	FAEYGEIK NIHLNLDR NIHLNLDLR GYTLVEYETK MREDYDSVEQDGDDEPGPQR
20.Glutathione S-transferase pi 1 (GSTP1)	6	MLLADQGQSWK PPYTVVYFPVR EEVTVETWQEGSLK FQDGDLTLYQSNTILR DQQEAALVDMVNDGVEDLR ALPGQLKPFETLLSQNQGKK
21.Eukaryotic translation initiation factor 5A (EIF5A)	7	VHLVGIDIFTGK EDLRLPEGDLGK VHLVGIDIFTGKK LPEGDLGKEIEQK NDFQLIGIQDGYLSLLQDSGEVR RNDFQLIGIQDGYLSLLQDSGEVR MADDLDFETGDAGASATFPMQCSALR
22.Nucleoside phosphorylase (NP)	15	LVFGFLNGR VFGFSLITNK ANHEEVLAAGK FPAMSDAYDR FEVGDIMLIR VIMDYESLEK NTAEWLLSHTK FHMYEGYPLWK FGDRFPAMSDAYDR DHINLPGFSGQNPLR LGADAVGMSTVPEVIVAR LEQFVSILMASIPLPK LVFGFLNGRACVMMQGR LTQAQIFDYGEIPNFPR VFHLLGVDLTVTNAAGGLNPK
23.Glyceraldehyde-3-phosphate dehydrogenase (GAPDH)	9	GALQNIIPASTGAAK VPTANVSVVDLTCR LVINGNPITIFQER LISWYDNEFGYSNR LVINGNPITIFQERDPSK VIISAPSADAPMFVGMGNHEK WGDAGAEYVVESTGVFTTMEK RVIISAPSADAPMFVGMGNHEK VIHDFNGIVEGLMTTVHAITATQK
24.Proteasome (prosome, macropain) subunit, beta type, 6 (PSMB6)	5	ITTTGSIANR QVLLGDQIPK LAAIAESGVER VTDKLTPIHDR QSFAIGSGSSYIYGYVDATYR
25.Annexin A1 (ANXA1)	10	DITSDTSGDFR TPAQFDADEL GVDEATIIDLTK GVDEATIIDLTKR ALTGHLEEVLLALK GLGTDEDTLIEILASR AAYLQETGKPLDETLK AAYLQETGKPLDETLKK QAWFIENEEQEYVQTVK GGPGSAVSPYPTFNPSSDVAALHK
26.Chloride intracellular channel 1 (CLIC1)	8	YLSNAYAR IGNCPFSQR GFTIPEAFR LFMVLWLK GVTFNVTTVDTK LAALNPESNTAGLDIFAK EEFASTCPDDEEIELAYE VLDNYLTSPLPEEVDETSAEDEGVSR
27.ATP synthase, H+ transporting, mitochondrial F0 complex, subunit d (ATP5H)	11	AGLVDDFEK SWNETLTSR SCAEWVSLSK

		AGLVDDFEKK IVEYEKEMEK YPYWPHQPIENL YTAQVDAEEKEDVK KYPYWPHQPIENL TIDWVAFAEIIPQNQK LAALPENPPAIDWAYYK NLIPFDQMTIEDLNEAFPETK
28.Phosphofructokinase, platelet (PFKP)	18	VTILGHVQR FLEHLSGAGK KQDFEHR TFVLEVMGR SFAGNLNTYK KFLEHLSGAGK YLEEIATQMR NVIFQPVAELK EWSGLLEELAR ELVVTQLGYDTR DLQSNVEHLTEK KEWSGLLEELAR MLAIYDGFDFGFAK IKELVVTQLGYDTR AIGVLTSGGDAQMNAAVR NVLGHMQQGGAPSPFDR IIEVVDAIMTTAQSHQR ASYDVSDSGQLEHVQPWSV
29.Eukaryotic translation initiation factor 6 (EIF6)	5	NSLPDTVQIR LNEAQPSTIATSMR ETEEILADV LKVEVFR HGLLVPNNTDQELQHIR TSIEDQDELSSLLQVPLVAGTVNR
30.Staphylococcal nuclease and tudor domain containing 1 (SND1)	25	QINLSNIR VLSGCAIIVR EGLVMVEVR QFLPFLQR GLATVIRYR FVDGEWYR LGTLSPAFSTR ADDADEFYYSR TIHLSSIRPPR IHVFYIDYGNR DTPDEPWAFPAR SEAVVEYVFSGSR SSHYDELLAAEAR VITEYLNAQESAK LIGKEVCFTIENK KGMWSEGNNGSHTIR EADGSETPEPFAAEAK NDIASHPPVEGSYAPR LRPLYDIPYMFEAR ANNPEQNR LSECEEQAK HFVDSHHQKPVNAIIEHVR NLPGLVQEGEPFSEATLFTK VWAHYEEQPVEEVMPLVEEK VLPQAQATEYAFAFIQVPQDDDA VNVTVDYIRPASPATETVPAFSEK
31.DEAD (Asp-Glu-Ala-Asp) box polypeptide 1 (DDX1)	11	MDQAIIFCR WQMNPYDR ELLIIGGVAAR DLGLAFEIPPHMK FNFGEIEEFKPPK GHVDILAPTQELAALEK DQLSVLENGVDIVGTGPR DNTRPGANSPMWSEAIK GIDIHGVPYVINVTLPEK EAQTSFLHLGYLPNQLFR FLVLDEADGLLSQGYSDFINR
32.Heat shock 27kDa protein 1 (HSPB1)	11	DWYPHSR GPSWDPFR RVPFLLR

		QLSSGVSEIR QDEHGYISR LFDQAFGLPR HEERQDEHGYISR QLSSGVSEIRHTADR VSLDVNHFADELTVK GPSWDPFRDWYPHSR LATQSNITIPVTFESR
33. Transketolase (TKT)	11	NSTFSEIFKK LDNLVAILDINR VLDPFTIKPLDR TVPFCSTFAAFFTR SVPTSTVFYPSDGVATEK GITGVEDKESWHGKPLPK ILATPPQEDAPSVDIANIR LGQSDPAPLQHQMDIYQK TSRPENAIYNNNEDFQVQAK SKDDQVTVIGAGVTLHEALAAELLK ILTVEDHYEGGIGEAVSSAVGEPGITVTHLA VNR
34. Proliferating cell nuclear antigen (PCNA)	7	SEGFDTYR FSASGELGNNGIK NLAMGVNLTSMK AEDNADTLALVFEAPNQEK ATPLSSTVTLMSADVPLVVEYK LMDLDVEQLGIPEQEYSCVVK LSQTSNVDKKEEAVTIEMNEPVQLTFALR
35. Far upstream element (FUSE) binding protein 1 (FUBP1)	22	LLDQIVEK AWEEYK SVMTEYK EMVLELIR IAQITGPPDR AWEEYKK GTPQQIDYAR VPDGMVGFIIGR SVQAGNPGGPGGGR IGGNEGIDVPIPR RPLEDGDQPDAK IQIAPDSGGLPER RPLEDGDQPDAKK IQFKPDDGTTPER MVMIQDGPQNTGADKPLR IGGDAGTSLNSNDYGYGGQK SVMTEYKVPDGMVGFIIGR IQQESGCKIQIAPDSGGLPER VAPQNDSTLPPMHQQQSR QQAAAYAQTSPQGMPPHPPAPQGG GRPAPGFHHGDGPGNAVQEIMIPASK MGQAVPAPTAPPGGQPDYSAAWAEYYR
36. Proteasome (prosome, macropain) subunit, alpha type, 2 (PSMA2)	11	RLTPTEVK AANGVVLATEK SVHKVEPITK GYSFSLTTFSPSGK LTPTEVKDYLAIA HIGLVYSGMGPDYR LVQIEYALAAVAGGAPSVGIK YNEDLEDAIHTAILTK RYNEDLEDAIHTAILTK LAQQYYLVYQEPIPTAQLVQR KLAQQYYLVYQEPIPTAQLVQR
37. Pyruvate kinase (PKM2)	18	IENHEGVR MMIGRCNR GDYPLEAVR ASDVHEVRK GDLGIEPAEK ITLDNAYMEK LDIDSPITAR IYVDDGLISLQVK DPVQEAWAEDVDLR FDEILEASDGIMVAR

		GADFLVTEVENGGSLGSK RFDEILEASDGIMVAR FGVEQDVMVFASFIR LNFSHGTHEYHAETIK EAEAAIYHLQLFEELR EAEAAIYHLQLFEELRR LAPITSDPTEATAVGAVEASFK TATESFASDPILYRPVAVALDTK
38. Annexin A5 (ANXA5)	15	FITIFGTR VLTEIIASR LYDAYELK SEIDLFNIR LIVALMKPSR GAGTDDHTLIR SEIDLFNIRK NFATSLYSMIK GTVTDFPGFDER ETSGNLEQLLAVVK GLGTDEESILLLTSR SIPAYLAETLYYAMK WGTDEEKFITIFGTR YMTISGFQJEEIDR QVYEEYGSSELEDDVVGDTSGYYQR
39. Cofilin 1 (CFL1)	4	YALYDATYETK LGGSAVISLEGKPL KEDLVFIFWAPESAPLK NIILEEGKEILVGDVGTVDVDPYATFVK
40. Heat shock protein 90kDa alpha (cytosolic), class A member 1 (HSP90AA1)	19	APFDLFENR HIYYITGETK DQVANSFVER APFDLFENRK TDTGEPMGRGTK RAPFDLFENR EDQTEYLEER DNSTMGYMAAKK HFSVEGQLEFR GVVDSDELPLNISR SLTNDWEDHLAVK HSQFIGYPITLFVEK HLEINPDHSIETLR NPDDITNEEYGEFYK KHLEINPDHSIETLR VILHLKEDQTEYLEER HNDDEQYAWESSAGGSFTVR RVFIMDNCEELIPEYLNFR
41. Thrombospondin 1 (THBS1)	20	FYVVMWK GFLLLASLR GPDPSPAFR SITLQVQEDR TIVTTLQDSIR LCNNPTPQFGGK GTSQNDPNWVVR FVFGTTPEDILR NALWHTGNTPGQVR DNCQYVYNVDQR QVTQSYWDTNPTR GGVNDNFQGVLQNVK CNYLGHYSDFMYR DDYAGVFVFGYQSSSR MENAELDVPIQSVFTR FTGSQPFQGVVEHATANK QHVVSVVEALLATGQWK CENTDPGYNCLPCPPR DLQAICGISCDELSSMVLELR IEDANLIPPVDDKFQDLVDAVR
42. Heat shock 70kDa protein 5 (glucose-regulated protein, 78kDa) (HSPA5)	26	LTPEEIER ALSSQHQR ITITNDQNR VYGERPLTK EFFNGKEPSR

		DAGTIAGLNVMR VEIIANDQGNR FEELNMDLFR NELESYAYSLK ELEEVQPIISK TWNDPVQQDIK SDIDEIVLVGGSTR AKFEELNMDLFR TFAPEISAMVLTK ITPSYVAFTPEGER KSDIDEIVLVGGSTR TKPYIQVDIGGGQTK NQLTSNPENTVFDK IINEPTAAAIAYGLDKR VTHAVVTVPAYFNDAQR DNHLLGTFDLTGIPPAPR IEWLESHQDADIEDFK GVPQIEVTFEIDVNGILR KVTHAVVTVPAYFNDAQR IEIESFYEGEDFSETLTR LYGSAGPPPTGEEDTAEKDEL
43. Prolyl 4-hydroxylase, beta polypeptide (P4HB)	17	LEFFGLK QLAPIWDK LKAEGSEIR TVIDYNGER THILLFLPK SNFAEALAAHK EADDIVNWLK NFEDVAFDEK NFEDVAFDEKK YQLDKDGVVLFK YKPESEELTAER LGETYKDHENIVIAK VDATEESDLAQQYGVR ILFIFIDSDHTDNQR HNQLPLVIEFTEQTAPK NNFEGEVTKENLLDFIK QFLQAAEAIDIPFGITSNSDVFSK
44. Heat shock protein 90kDa beta (Grp94), member 1 (HSP90B1)	22	KTFEINPR GLFDEYGSK YFMAGSSR FAFQAEVNR LGVIEDHSNR EAESSPFVER SILFVPTSAPR KEAESSPFVER DISTNYYASQK EFEPLLNWMK GVVDSDDLPLNVSR NLLHVTDTGVGMTR IADDKYNDTFWK VFITDDFHDMMMPK RVFITDDFHDMMMPK EEEEAIQLDGLNASQIR EAVEKEFEPLLNWMK FQSSHPTDITSLDQYVER ESDDPMAYIHFTAEGEVTFK TVWDWELMNDIKPIWQRPSK TDDEVVQREEEAIQLDGLNASQIR LTESPCALVASQYGWSGNMERIMK
45. Heat shock 27kDa protein 1 (HSPB1)	11	DWYPHSR GPSWDPFR RVPFLLR QDEHGYISR LFDQAFGLPR DGVVEITGKHEER HEERQDEHGYISR VSLDVNHFAPELTVK GPSWDPFRDWYPHSR LATQSNIEITPVTFESR

		KYTLPPGVDPTQVSSSLSPGTLTVEAMPK
46.Heterogeneous nuclear ribonucleoprotein C (C1/C2) (HNRNPC)	7	VPPPPPIAR GDDQLELIK YGKIVGCSVHK GFAFVQYVNER QKVDLSLENLEK MIAGQVLDINLAAEPK SAAEMYGSSFDLDYDFQR
47.Tropomyosin 4 (TPM4)	14	HIAEEADR AEGDVAALNR HIAEEADRK MEIQEMQLK LVILEGELER IQLVEEELDR EKAEGDVAALNR KLVILEGELER RIQLVEEELDR IQALQQADEAEDR LVILEGELERAEEER IQLVEEELDRAQER KIQALQQADEAEDREENVGLHQLDQTLNE LNCI
48.Actin, beta (ACTB)	12	AGFAGDDAPR GYSFTTAEER HQGVMVGMGQK AVFPSIVGRPR IWHHTFYNELR SYELPDGQVITIGNER YPIEHGIVTNWDDMEK VAPEEHPVLLTEAPLNPK DLYANTVLSGGTTMYPGIADR KDLYANTVLSGGTTMYPGIADR DLYANTVLSGGTTMYPGIADRMQK TTGIVMDSGDGVTHTVPIYEGYALPHAILR
49. Keratin 7 (KRT7)	25	NEISEMNR LDADPSLQR LQAEIDNIK WTLQEQK KLLEGEESR FETLQAQAGK YEDEINRR SAYGGPVGAGIR EYQELMSVK NKYEDEINR QEELEAALQR AEAEAWYQTK TAAENEFVVLK GQLEALQVDGGR VRQEESEQIK SLDLGIIAEVK LALDIEIATYR TAAENEFVVLKK AKQEELEAALQR QEELEAALQRAK VDALNDEINFLR LPDIFEAQIAGLR TMQDVVEDFKNK EVTINQSLAPLR TLNETELTELQSQISDTSVVLMSMNSR
50.SEC13 homolog (<i>S. cerevisiae</i>) (SEC13)	4	LEAHSWVR NGGQILIADLR LWKEEEDGQWK EEQKLEAHSWVR
51.Annexin A1 (ANXA1)	15	SEIDMNDIK DITSDTSGDFR TPAQFDAELR GVDEATIIDLTK GVDEATIIDLTKR GTDVNVFNTILTTR

		ALTGHEEVVLLLK KGTDVNVFNILTTR GLGTDEDTLIEILASR SEDFGVNEDLADSDAR AAYLQETGKPLDETLK AAYLQETGKPLDETLKK GDRSEDFGVNEDLADSDAR QAWFIENEQEYVQTVK GGPGSAVSPYPTFNPSSDVAALHK
52.Stathmin 1/ oncoprotein 18 (STMN1)	10	KLEAAEER DKHIEEVR KSHEAEVLK DLSLEEIQK EHEKEVLQK AIEENNFSSK DLSLEEIQKK ESVPEFPLSPPK ASGQAFELILSPR MASSDIQVKELEK SKESVPEFPLSPPK RASGQAFELILSPR
53.Lectin, galactoside-binding, soluble, 3 (LGALS3)	9	SDGIYIINLK FAAATGATPIAGR KSDGIYIINLK GAHSVGLMWWMLAR FTPGTFTNQIAAFR AIVAIENPADVSVISSR EHPWEVMPDLYFYR FTPGTFTNQIAAFREPR FLAAGTHLGGTNLDFQMEQYIYK
54.Non-metastatic cells 1, protein (NM23A) expressed in (NME1)	9	GLVGEIIR GDFCIQVGR DRPFFAGLVK FMQASEDLLK TFIAIKPDGVQR NIIHGSDSVESAEK VMLGETNPADSKPGTIR FMQASEDLLKEHYVDLK YMHSGPVVAMVWEGLNVVK
55.Eukaryotic translation initiation factor 5 (EIF5A)	8	VHLVGIDIFTGK EDLRLPEGDLGK VHLVGIDIFTGKK LPEGDLGKEIEQK KYEDICPSTHNMDVPNIK NDFQLIGIQDGYLSLLQDSGEVR RNDFQLIGIQDGYLSLLQDSGEVR MADDLDFETGDAGASATFPMQCSALR
56.Chloride intracellular channel 1 (CLIC1)	8	YLSNAYAR IGNCPFSQR GFTIPEAFR LFMVLWLK GVTFNVTVDTK LAALNPESNTAGLDIFAK EEFASTCPDDEEIELAYE VLDNYLTSPLPEEVEDTSAEDEGVQSQR
57.Vimentin (VIM)	7	LQEEMLQR QDVDNASLAR GTVSTNPAVKEGK EEAENTLQSFR NLQEAEEWYKSK VESLQEEIAFLKK KVESLQEEIAFLK
58.Tumor protein, translationally-controlled 1 (TPT1)	6	YIKDYMK LEEQRPER GKLEEQRPER VKPFMTGAAEQIK EDGVTPYMIFFK DLISHDEMFSDIYK