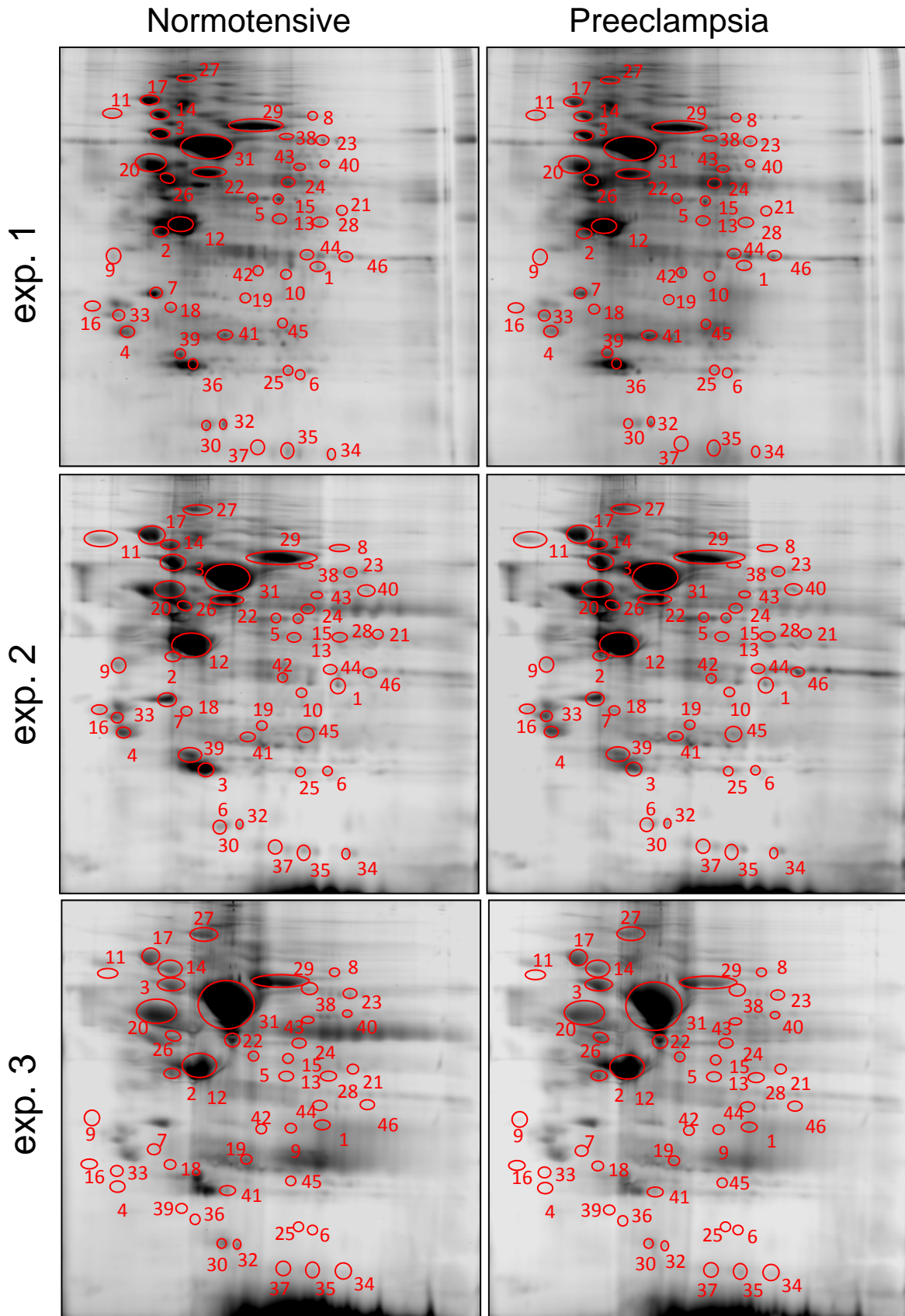


**Zhang et al., Supplemental Figure S1.** Cycle switch, two dimensional fluorescence difference gel electrophoresis (2D-DIGE) analysis of nitrosoproteins in normotensive and preeclamptic human placentas. As a supplement for Figure 4 and Table 1, black and white images shown fluorescent signals from the red and green channels of all three paired normotensive and preeclamptic human placentas are shown. The spots circled and numbered represents 46 nitrosoproteins as listed in Table 2. Ratios (preeclampsia/nomormal) in signal intensities for each spot were calculated for statistical analysis.

# Zhang et al., Supplemental Figure S1



**Zhang et al., Supplemental Table S1: 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. annexin A2 (ANXA2)	15	WISIMTER AYTNFDAER QDIAFAYQR TPAQYDASELK TNQELQEINR SLYYYIQQDTK SYSPYDMLESIR GVDEVTIVNILTNR SALSGHLETVILGLLK TDLEKDIISDTSGDFR LSLEGDHSTPPSAYGSVK AEDGSVIDYELIDQDAR RAEDGSVIDYELIDQDAR AYTNFDAERDALNIETAIK ASMKGLGTDEDSLIEICSR
2. keratin 19 (KRT19)	26	QNQEQYR SEVTDLRR FETEQALR APSIHGGSGGR IRDWYQK VLDETLAR IVLQIDNAR ILGATIENSR DAEAWFTSR LTMQNLNDR LEQEIATYR MSVEADINGLR KDAEAWFTSR TKFETEQALR NHEEEISTLR SQYEVMAEQNR MSVEADINGLRR SRLEQEIATYR AALEDTLAETEAR EVAGHTEQLQMSR QSSATSSFGLGGGSVR DYSHYYTTIQDLR TLQGLEIELQQLSMK SLLEGQEDHYNNLSASK TDLEMQIEGLKEELAYLK FGAQLAHIQALISGIEAQLGDVR
3. heat shock 70kDa protein 5 (glucose-regulated protein, 78kDa)(HSPA5)	25	LTPEEIER ALSSQHQAR ITITNDQNR VYGERPLTK EFFNGKEPSR VEIANDQGNR DAGTIAGLNVMR FEELNMDLFR NELESYAYSLK TWNDPSVQQDIK SDIDEIVLVGGSTR AKFEELNMDLFR TFAPEEISAMVLT ITPSYVAFTPEGER KSDIDEIVLVGGSTR TKPYIQVDIGGGQTK NQLTSPENTVFDK IINEPTAAAIYGLDKR SQIFSTASDNQPTVTIK VTHAVVTVPAYFNDAQR DNHLLGTFDLTGIPPAPR IEWLQSHQADIEDFK GVPQIEVTFEIDVNGILR KVTHAVVTVPAYFNDAQR

		IEIESFYEGEDFSETLTR
4. tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, zeta polypeptide (YWHAZ)	14	MKGDYYR EKIETELR YDDMAACMK EMQPTHPIR DSTLIMQLLR KEMQPTHPIR YLAEVAAGDDKK FLIPNASQAESK DICNDVLSLLEK VVSSIEQKTEGAEK SVTEQGAELSNEER GIVDQSQQAYQEAFEISK TAFDEAIAELDTLSEESYK GIVDQSQQAYQEAFEISKK
5. GDP dissociation inhibitor 2 (GDI2)	13	TTMRDVYK VICILSHPIK MLLYTEVTR IPGSPPEMGR LYSESLARYGK GRDWNVDLIPK DLGTESQIFISR FKIPGSPPEMGR MTGSEFDFEEMKR FLVYVANFDEKDPR EIRPALELLEPIEQK SPYLYPLYGLGELPQGFAR FDLGQDVIDFTGHALALYR
6. peroxiredoxin 1 (PRDX1)	9	IGHPAPNFK TIAQDYGVLK DISLSDYKGG ATAVMPDGQFK LVQAFQFTDK QITVNDLPVGR QGGLGPMNIPLVSDPK KQGGLGPMNIPLVSDPK QGGLGPMNIPLVSDPKR
7. annexin A5 (ANXA5)	17	FITIFGTR VLTEIIASR LYDAYELK SEIDLFNIR LIVALMKPSR GAGTDDHTLIR MLVVLLQANR NFATSLYSMIK GTVTDFPGFDER KNFATSLYSMIK DLLDDLKSELTGK ETSGNLEQLLAVVK GLGTDEESILTLTISR SIPAYLAETLYAMK WGTDEEKFITIFGTR YMTISGFQIETIDR DPDAGIDEAQVEQDAQALFQAGELK
8. aconitase 2, mitochondrial(ACO2)	16	EGWPLDIR NTIVTSYNR LNRPLTSEK LTGSLSGWSSPK RLNRPLTSEK VAEKEGWPLDIR SQFTITPGSEQIR FRLEAPDADELPK LQLLEPFDKWDGK DSSGQHVDVSPTSQR NAVVTQEFPGVPDTAR WVVGIDENYEGSSR IVYGHLDPPASQEIER DLGGIVLANACGPCIGQWDR VAMQDATAQMAMLQFISSGLSK

		VAMSHFEPNEYIHYDLLEK
9. tropomyosin 2 (beta) (TPM2)	16	LDKENAIDR MELQEMQLK LVILEGELER IQLVEEELDR KLVILEGELER ATDAEADVASLNR QLEEEQQALQK RIQLVEEELDR TIDDLEETLASAK KATDAEADVASLNR QLEEEQQALQKK ATDAEADVASLNR GTEDEVEKYSESVK LVILEGELERSEER IQLVEEELDRAQER EENVEIHQTLDQTLLELN
10. Voltage-dependent anion channel 2 (VDAC2)	6	NNFAVGYR LTLALVDGK YQLDPTASISAK LTFDITTFSPNTGK VNNSLIGVGYTQTLRPGVK TGFDFLHTNVNDGTEFGGSYQK
11. protein kinase C substrate 80K-H (PRKCSH)	16	LIELQAGKK NKFEEAER LWEEQLAAAK SLKDMESIR SLEDQVEMLR ESLQQMAEVTR EEAEKPEREK TVKEEAERPER ETMVTSTTEPSR KSLEDQVEMLR AQEQELAADAFK YEQGTGCWQGNR ERESLQQMAEVTR SEALPTDLPAPSAPDLTEPK LGGSPSTLGTWGSWIGPDHDK MPPYDEQTFADAAQEAR
12. actin, beta (ACTB)	10	AGFAGDDAPR GYSFTTAAER AVFPSIVGRPR IWHHTFYNELR SYELPDGQVITIGNER VAPEEHPVLLTEAPLNPK DLYANTVLSGGTMMYPGIADR KDLYANTVLSGGTMMYPGIADR KYSVWIGGSILASLSTFQQMWISK TTGIVMDSGDGVTHTVPIYEGYALPHAILR
13. tu translation elongation factor, mitochondrial (TUFM)	10	GTVVTGTLER AEAGDNLGALVR TVVTGIEMFHK AEAGDNLGALVRGLK KYEEIDNAPEER LLDAVDYIPVPAR GITINAAHVEYSTAAR DKPHVNVGTIGHVDHGK ADAVQDSEMVELVELEIR DLEKPFLLPEAVYSVPGR
14. Heat shock protein 90kDa alpha (cytosolic), class A member 1 (HSP90AA1)	24	FYEQFSK TDTGPEMGR APFDLFENR FENLCKIMK YIDQEELNK LGIHEDSQNR HIYYITGETK DQVANSFVER APFDLFENRK TDTGPEMGRGTK

		RAPFDLFENR LGIHEDSQNRK EDQTEYLEER DNSTMGYMAAKK HFSVEGQLEFR GVVDEDLPLNISR SLTNDWEDHLAVK ELHINLIPNKQDR HSQFIGYPITLFVEK HLEINPDHSIETLR NPDDITNEEYGEFYK KHLEINPDHSIETLR VILHLKEDQTEYLEER HNDDEQYAWESSAGGSFTVR
15. enolase 1, (alpha)(ENO1)	10	IGAEVYHNLK GNPTVEVDLFTSK YISPDQLADLYK LAQANGWGMVSHR VVIGMDVAASEFFR AAVPSGASTGIYEALER LAMQEFMILPVGAANFR DATNVGDEGGFAPNILENK FTASAGIQVVGDDLTVTNPK DYPVVSIEDPFDDWGAWQK
16. clathrin, light chain (CLTB)	9	VTEQEW R LTQEPESIR DLEEWNR RLQELDAASK VAQLCDFNPK LTQEPESIRK EETPGTEWEK KDLEEWNR ESKEETPGTEWEK
17. heat shock protein 90kDa beta (Grp94), member 1(HSP90B1)	17	KTFEINPR GLFDEYGSK IYFMAGSSR FAFQAEVNR LGVIEDHSNR EAESSPFVER SILFVPTSAPR KEAESSPFVER EFEPLLWMMK GVVSDDLLPLNVS R NLLHVTD TGVMTR VFITDDFHDMMPK RVFITDDFHDMMPK EEEAIQLDGLNASQIR FQSSHPTDITSLDQYVER ESDDPMAYIHFTAEGEVTFK TVWDWELMNDIKPIWQRPSK
18. chloride intracellular channel 1 (CLIC1)	7	YLSNAYAR GFTIPEAFR IGNCPFSQR GVTFNVTTVDTK NSNPALNDNLEK LAALNPESNTAGLDIFAK VLDNYLTSPLPEEVDETSAEDEGVSR
19. enoyl Coenzyme A hydratase 1, peroxisomal (ECH1)	6	YQETFNVIER GDDVARISWYLR HVLHVQLNRPNK EVDVGLAADVGTLQR EVMLDAALALAAEISSK VIGNQSLVNELAFTAR
20. prolyl 4-hydroxylase, beta polypeptide (P4HB)	19	ILEFFGLK QLAPIWDK ENLLDFIK LKAEGSEIR TVIDYNGER THILLFLPK SNFAEALAAHK

		EADDIVNWLK NFEDVAFDEK KSNFAEALAAHK NFEDVAFDEKK YQLDKDGVVLFK YKPESEELTAER FDEGRNFEGEVTK LGETYKDHENIVIAK VDATEESDLAQQYGVV ILFIFIDSDHTDNQR HNQLPLVIEFTEQTAPK QFLQAAEAIDDPFGITSNSDVFSK
21. isocitrate dehydrogenase 2 (NADP+), mitochondrial (IDH2)	13	IIWQFIK HAHGDQYK NILGGTVFR WPLYMSTK LDGNQDLIR YFDLGLPNR GKLDGNQDLIR TIEEAAHGTVTR LVPGWTKPITIGR VAKPVVEMDGDDEMTR LNEHFLNTTDFLDTIK LIDDMVAQVLKSSGGFVWACK ASGSRPAWAPAALTAPTSEQQPR
22. protein disulfide isomerase family A, member 3 (PDIA3)	17	FLQDYFDGNLK FLQDYFDGNLKR QAGPASVPLR YGVSGYPTLK FVMQEEFSR LAPEYEAATR DGEEAGAYDGPR GFPTIYFSPANK RLAPEYEAATR ELSDFISYLQR EATNPPVIQEEKPK DLLIAYYDVYK MDATANDVPSPEYVR VVVAENFDEIVNNENK DASIVGFFDSSFSEAHSEFLK TFSHELSDFGLESTAGEIPVVAIR KTFSELSDFGLESTAGEIPVVAIR
23. transketolase (TKT)	15	HQPTAIIAK ESWHGKPLPK NSTFSEIFKK ISSDLDGHPVPK LDNLVAILDINR KISSDLDGHPVPK VLDPFITKPLDR TVPCSTFAAFFTR SVPTSTVFYPSDGVATEK GITGVEDKESWHGKPLPK ILATPPQEDAPSVDIANIR LGQSDPAPLQHQMDIYQK TSRPENAIYNNNEDFQVGQAK SKDDQVTVIGAGVTLHEALAAELLK ILTVEDHYEGGIGEAUVSSAVVGEPIVTHLAVNR
24. glutamate dehydrogenase 1 (GLUD1)	10	YNLGLDLR MVEGFFDR NLNHVSYGR VYNEAGVTFT DDGSWEVIEGYR DIVHSGLAYTMER GGIRYSTDVSVEVK HGGTIPIVPTAEFQDR DSNYHLLMSVQESLER KGFIPGIDVPAPDMSTGER
25. peroxiredoxin 1 (PRDX1)	7	IGHPAPNFK TIAQDYGVLK DISLSDYKGGK

		<p>ATAVMPDQGFK  LVQAFQFTDK  QITVNDLPVGR  KQGGLGPMNIPLVSDPK</p>
26. vimentin (VIM)	25	<p>LQEMLQR  QVDQLTNDK  QESTEYRR  DNLAEDIMR  QDVNDASLAR  FADLSEAANR  VELQELNDR  ILLAELEQLK  LGDLYEEEMR  MALDIEIATYR  EKLQEEMLQR  NLQEAEEWYK  EEAENTLQSFYR  SLYASSPGGVYATR  MALDIEIATYRK  HLREYQDLLNVK  VESLQEEIAFLKK  ISLPLPNFSSLNLR  TNEKVELQELNDR  RMFGGPGTASRPSSSR  VEVERDNLAEDIMR  LQDEIQNMKEEMAR  DGQVINETSQHDDLE  LLQDSVDFSLADAINTEFK  EMEENFAVEAANYQDTIGR</p>
27. hypoxia up-regulated 1 (HYOU1)	20	<p>RPLKNDEL  MGPPYQPK  YFQHLLGK  KYPDYESK  LAGLFNEQR  TLGGLEMELR  FTKPRPRPK  VPRVQEVLLK  EAGMQPQLQIR  DIEAKMMALDR  QADNPHVALYQAR  FPEHELTFDPQR  DAVVYPILVEFTR  AHFNLDSEGVLSLDR  DAVITVPVFFNQAER  LYQPEYQEVSTEEQR  NINADEAAAAMGAVYQAAALSK  VLQLINDNTATALSYGVFR  YSHDFNFHINYGDLGFLGPEDLR  SLAEDFAEQPIKDAVITVPVFFNQAER</p>
28. phosphoglycerate kinase 1 (PGK1)	10	<p>NNQITNNQR  FHVEEGK GK  NNQITNNQRIK  AHSSMVGVNLPQK  LGDVYVNDAFGTAHR  VSHVSTGGGASLELLEGK  ACANPAAGSVILLENLR  ITLPVDFVTADKFDENAK  SVVLMShLGRPDGVPMPDK  QIVWNGPVGVEWEAFAR</p>
29. transferrin (TF)	21	<p>APNHAVVTR  ASYLDCIR  YLGEYVK  KSCHTAVGR  KASYLDCIR  WCALSHHER  DSGFQMNQLR  SASDLTWDNLK  EGYYGTGAFR  DYELLCLDGTR  MYLGYEYVTAIR</p>



		SKEFQLFSSPHGK CSTSSLLEACTFR KPVVEYANCHLAR EDPQTFYYAVAVVK KCSTSSLLEACTFR DCHLAQVPSHTVVAR WCAVSEHEATKCQSFR NLNEKDYELLCLDGTR SAGWNIPIGILLYCDLPEPR KPVDEYKDCHLAQVPSHTVVAR
30. transgelin 2(TAGLN2)	8	DVGRPQPGR IQASTMAFK EVQQKIEK ENFQNWLK TLMNGLGLAVAR NFSNDQLQEGK DDGLFSGDPNWFPK QMEQISQFLQAAER
31. albumin (ALB)	22	FQNALLVR KLYEIAI LDELREDEGK CCTESLVNR DAHKSEVAHR HPDYSVLLLLR RHPDYSVLLLLR CCAAADPHECYAK DVFLGMFLYEYAR ETCFAEPTMRIR DVFLGMFLYEYAR QNCELFEQLGEYK QEPERNECFQHK ADDKETCFAEPTMR HPYFYAPELFFAK RPCFSALEVDETYVPK VFDEFKPLVEEPQNLK VHTECCHGDLLCADDR EFNAETFTFHADICTLSEK TYETTLEKCCAAADPHECYAK VHTECCHGDLLCADDRADLAK LVRPEVDVMCTAFHDNEETFLK
32. superoxide dismutase 1, soluble (SOD1)	4	LACGVIGIAZ HGGPKBZER HVGDLGNVTADK GLTEGLHGFHVHEFGDNTAGCTSAGPHFBPLSR
33. family with sequence similarity 82, member B (FAM82B)	6	LAAFWLMKAK ALEKNESSFASHK IANAYIIKEHFEK LPAGTSGSRGHCGPCR WYAICLSDVGDYEGIKAK DATSIHLMGIWCYTFEAEMPWYQR
34. peptidylprolyl isomerase A (cyclophilin A)(PPIA)	9	VSFELFADK FEDENFILK EGMNIVEAMER GFGYKGSCFHR VSFELFADKVPK VKEGMNIVEAMER IIPGFMCQGGDFTR SIYGEKFEDENFILK VNPTVFFDIAVDGEPLGR
35. peptidylprolyl isomerase A (cyclophilin A)(PPIA)	8	VSFELFADK FEDENFILK EGMNIVEAMER GFGYKGSCFHR VKEGMNIVEAMER IIPGFMCQGGDFTR SIYGEKFEDENFILK VNPTVFFDIAVDGEPLGR
36. chorionic somatomammotropin hormone 1 (placental lactogen)	10	NYGLLYCFR DMDKVETFLR LFDHAMLQAHR

(CSH1)		DLQEGITLMGR VETFLRMVQCR FDTNSHNDALK ISLLIESWLEPVR AHQLAIDTYQEFETYIPK SMFANNLVYDTSDDYHLLK YSFLHDSQTSFCFSDSIPTSPNMEETQQK
37. peptidylprolyl isomerase A (cyclophilin A)(PPIA)	8	VSFELFADK FEDENFILK EGMNIVEAMER VSFELFADKVPK VKEGMNIVEAMER IIPGFMCQGGDFTR SIYGEKFEDENFILK VNPTVFFDIAVDGEPLGR
38. calpain 6 (CAPN6)	10	YTELVEEK NVNNPIFGR MSCWNLAR NFHKLNVCR IFSEVPVQLR GHYTMDIR LHHLYQER FRLHHLYQER GNYVLVPTMFQHGR TTDIIIVQVWNSR
39. apolipoprotein A-I (APOA1)	17	AKPAEDLR LSPLGEEMR ATEHLSTLSEK QGLLPVLEFK DLATVYVDVLK VQPYLDDFQK WQEEMELYS THLAPYSDEL QEMSKDLEEVK VSFLSALEEYTK DYVSQFEGSALGK KWQEEMELYS VKDLATVYVDVLK LLDNWDSVTSTFSK EQLGPVTQEFWDNLEK LREQLPVTQEFWDNLEK EQLGPVTQEFWDNLEKETGLR
40. pyruvate kinase, muscle (PKM2)	15	
41. heat shock 27kDa protein 1 (HSPB1)	8	DWYPHSR GPSWDPFR QLSSGVSEIR QDEHGYISR LFDQAFGLPR VSLDVNHFADELTVK GPSWDPFRDWYPHSR LATQSNEITIPVTFESR
42. annexin A2 (ANXA2)	19	WISIMTER AYTNFDAER QDIAFAYQR TPAQYDASELK DIISDTSGDFR TNQELQEINR DIISDTSGDFRK SLYYYIQQDTK SYSPYDMLISIR GVDEVTIVNILTNR YSPYDMLISIRK TKGVDEVTIVNILTNR GLGTDEDSLIEIICSR TDLEKDIISDTSGDFR LSLEGDHSTPPSAYGSVK AEDGVIDYELIDQDAR RAEDGVIDYELIDQDAR AYTNFDAERDALNIETAIK

		ASMKGLGTDEDSLIEICSR
43. catalase (CAT)	13	LNVITVGPR LFAYPDTHR LSQEDPDYGR DPASDQMQRHWK AFYVNVLNNEQR FNTANDDNVTQVR DPILFPSFIHSQK NAIHTFVQSGSHLAAR GAGAFGYFEVTHDITK LGPNYLHIPVNCYPYR FSTVAGESGSADTVRDRP GPLLVQDVVFTDEMAHFDR FYTEDGNWDLVGNNTPIFFIR
44. annexin A2 (ANXA2)	13	WISIMTER AYTNFDAER QDIAFAYQR TNQELQEINR SLYYYIQQDTK SYSPYDMLESIR GVDEVTIVNILTNR TDLEKDIISDTSGDFR LSLEGDHSTPPSAYGSVK AEDGSVIDYELIDQDAR RAEDGSVIDYELIDQDAR AYTNFDAERDALNIETAIK ASMKGLGTDEDSLIEICSR
45. carbonic anhydrase I (CA1)	10	VLDALQAIK GGPFSDSYR ADGLAVIGVLMK ESISVSSEQLAQFR YSAELHVAHWNSAK LYPIANGNNQSPVDIK HDTSLKPISVSNPATAK MASPDWGYDDKNGPEQWSK EIINVGHSHFVNFEDNDNR SLLSNVEGDNAVPMQHNNRPTQPLK
46. glyceraldehyde-3-phosphate dehydrogenase (GAPDH)	7	VVDLMAHMASK LVINGNPITIFQER LISWYDNEFGYSNR LVINGNPITIFQERDPSK VIISAPSADAPMFVMGVNHEK WGDAGAEEVVESTGVFTTMEK RVIISAPSADAPMFVMGVNHEK