

Supplemental Table 1. Erythrocyte membrane peptides labeled by some (but not all) of the glycolytic enzymes derivatized with a photoactivatable cross-linking reagent.

The first column shows the identified membrane protein. The second, third, fourth and fifth columns list the peptides tagged by GAPDH, aldolase, lactate dehydrogenase and pyruvate kinase, respectively. The number at the beginning and end of each peptide shows where the peptide is located in the protein sequence. The bold characters in larger font constitute the biotin tagged amino acids.

Label recipient protein	Labeling enzyme			
	GAPDH	aldolase	LDH	PK
α- spectrin	<p>–</p> <p>–</p> <p>969 QAAPVEGVAGEQR 981</p> <p>1199IEKKCQALSAADPGSDLF</p> <p>SVQALQR1223</p> <p>1927 DYAFQEFNWK1936</p>	<p>495QEAFLENEDLGNSLGSAAE</p> <p>ALLQK517</p> <p>674EATKQKGTQLHEANQQL</p> <p>QFENNAEDLQR701</p> <p>–</p> <p>–</p> <p>1927 DYAFQEFNWK 1936</p>	<p>495QEAFLENEDLGNSLGSAAE</p> <p>ALLQK 517</p> <p>674EATKQKGTQLHEANQQL</p> <p>QFENNAEDLQR 701</p> <p>969 QAAPVEGVAGEQR981</p> <p>1199IEKKCQALSAADPGSDL</p> <p>FSVQALQR 1223</p> <p>–</p>	<p>495QEAFLENEDLGNSLGSAAE</p> <p>ALLQK 517</p> <p>674EATKQKGTQLHEANQQL</p> <p>QFENNAEDLQR 701</p> <p>–</p> <p>1199IEKKCQALSAADPGSDL</p> <p>FSVQALQR 1223</p> <p>1927DYAFQEFNWK1936</p>
β- spectrin	<p>–</p> <p>239NVAERQLGIIPLLDPEDVF</p> <p>TENPDEKVQQQLQAFSTYR</p> <p>264</p> <p>336GVQQQLQAFSTYR348</p> <p>–</p> <p>910 AANSLVESGHPR 921</p> <p>1163QEFQKDAKQAEAILSNQ</p> <p>EYTLAHLEPPDSLEAAEAGIR</p> <p>1200</p> <p>1226 LVAEGNLYSDK 1236_</p> <p>–</p> <p>–</p> <p>1285KLLTSQDVSYDEAR</p> <p>1298</p>	<p>192HVNVTNFTSSWK 203</p> <p>–</p> <p>–</p> <p>910 AANSLVESGHPR 921</p> <p>1163QEFQKDAKQAEAILSNQ</p> <p>EYTLAHLEPPDSLEAAEAGIR</p> <p>1200</p> <p>–</p> <p>–</p> <p>–</p>	<p>–</p> <p>239NVAERQLGIIPLLDPEDVF</p> <p>TENPDEK 264</p> <p>–</p> <p>–</p> <p>–</p> <p>1163QEFQKDAKQAEAILSNQ</p> <p>EYTLAHLEPPDSLEAAEAGIR</p> <p>1200</p> <p>–</p> <p>1265EASVLLLRDNLELQNFLQ</p> <p>NCQELTLWINDK 1293</p> <p>–</p>	<p>187TAGYPHVNVTNFTSSWKD</p> <p>GLAFN 209</p> <p>239NVAERQLGIIPLLDPEDVF</p> <p>TENPDEK264</p> <p>–</p> <p>616EQCFEELSNMAAGR629</p> <p>910 AANSLVESGHPR921</p> <p>–</p> <p>–</p> <p>–</p> <p>–</p> <p>–</p> <p>1293KLLTSQDVSYDEAR</p>

	- -	- 1927 DYAFQEFNWK 1936	-	1306 -
Ankyrin	134 GANQNVATEDGFTPLAV ALQQGHENVVAHLINYGTK 169 - 493 NANPNLATTAGHTPLHIA A512 - - - - - - - - - 1462 ANMENLYTALQSIDR 1476 1519 DELLSPASLGCALSSPLR 1536 1612 GPELGSLELVEDDTVDS ATNGLIDLLEQ 1640	- - 493 NANPNLATTAGHTPLHIA AR512 - - - - - - - 1464 MENLYTALQSIDR 1476	- 211 HIAAHYENLNVAQLLLNR 228 - - 809 TVEILDVSEDEGEELISFK 828 1029 LDQILNGMDEELGSLEEL EK 1048 1127 TFSPIVTVEPR 1137 1172 LLCSVIGGTDQAQWEDI TGTTK 1193 1386 YSILSESTPGSLSGTE 1401 - 1503 DYSLSPSQMNGYSSLQD ELLSPASLGCALSSPLR 1536 1612 GPELGSLELVEDDTVDS ATNGLIDLLEQ 1640	- - - 599 AWN GYTPLHIAAK 611 630 SLLQYGGSSANAESVQGV PLHLAA 643 - 1087 LVPLVQATFPENAVTKR V1104 - - - - 1508 PSQMNGYSSLQD ELLS PASLGCALSSPLR 1536 1612 GPELGSLELVEDDTVDS ATNGLIDLLEQ 1640
Band 3	-	-	-	312 GFLDCSLVLPPTDAPSEQA LLSLVPVQR 340
α- adducin	623 VPEPTTGDDSDAATFKPTL	-	-	-

	PDLSPDEPSEALGFPMLEK 660			
Protein 4.1	– 764 TITYEAAQTDDNSGDLDP GVLL 785	– –	212CKV SLLDDTVYECVVEK 228 –	– –
ABCG2	–	–	237T IIFSIHQPR 246	–
p55	396FIV FIAPTDQGTQTEALQQ LQK 417	396FIV FIAPTDQGTQTEALQQ LQK 417	114GDEI LEINGTNVTNHSVD QLQK 135	114GDEI LEINGTNVTNHSVD QLQK 135
PK	–	–	–	325I CATQMLESMIK 336 88I KNV R TATESFASDPILYRPV AVALDTK 115
Glut 1	314GI VNTAFTVVSLFVVER- 330	–	–	314GI VNT A FTVVSLFVVER 330
Rh	236NA VFNTYYAVAVSVVTAI SGSSLAHPQR 263	236NA VFNTYYAVAVSVVTAIS G SSLAHPQR 263	–	–
Dematin	–	318V FAMSPPEEFGK 328	–	318 V FAMSPPEEFGK 328
aldolase	1MPYQ YPALTPEQKKELSDIAH R 22 – – – –	– – 116 GILAADESVGSM- 127 232C QQ NGI VPIVEPEILPDG DHDLK 254 274G Q SE EEASINLNAINK 28 9 316PPA V T GITFLSGGQ S EEEA SINLNAINK 343	1MPYQ YPALTPEQKKELSDIAH R 22 – – – –	1MPYQ Y P ALTPEQKKELSDIA HR 22 – – – –
GAPDH	65GK LIVINGNPITIFQER 80 – 125S ADAPMFVMGVNHEK 139 152C TNCLAPLAK 162	– 82P SKIK W GDAGA EYVVESTG VFTTMEK 107 – –	65GK L VINGNPITIFQER 80 – 125S ADAPMFVMGVNHEK 139 –	– – – –

	168FGIV EGLMTTVHAITATQ K 186 324V VDLMAHMASK 334	— —	— 324V VDLMAHMASK 334	— —
LDH	— — 115G VVNI ^V PGFGPTAGAAIAS HEDVDK 139 — — — —	— — — — — — —	43D LADLALVDV AL 55 58L KGEMMDL Q HGSLFLR 73 — 133I LVSNPVDILTYI VW K 149 158V IGSGCNLDSAR 169 184S CHGW VL GEHGDSSVP VWSGMNVAGVSLK 212 246G YTSWAIGLSVAD LA260 191G EHGDSSVPVWSGMNV AGVSLK 212	— — — — — — — —
Actin	— — —	144A SGR TT GIVMDSGDGVT HTVPIYEGYALPHAILR 177 121Q IMFETFNT TG IVMDSGD GVTHTVPIYEGYALPHAILR 158 263Q PSFLGM E SCGIHETTFNS IMK 284	— 121Q IMFETF N TT G IVMDSGD GVTH T VPIYEGYALPHAILR 158 — —	— — — 295A N T VLSSGGTTMYPGIADR 312
Stomatin	—	—	221V IAAEGEMNASR 232	—
α-Hb	—	45H FDLSHGSAQVK 56	—	45 H FDLSHGSAQVK 56
Rap 1b	—	—	—	151 K INVNEIFYDLVR 163
SUMO4	—	—	12 T ENNNHINLK 21	—