Supplementary Material

Figure S1: Deconvolution of two peptides from the fraction A1 (eluted at 24.8min) corresponding to the fragments 2-10 and 110-117 of hemoglobin α chain.

>tr|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUVI|ABDUV

Figure S2: Deconvolution of three peptides from the fraction A2 (eluted at 64.5min) corresponding to the fragments 45-57, 75-95 and 119-145 of hemoglobin α chain.

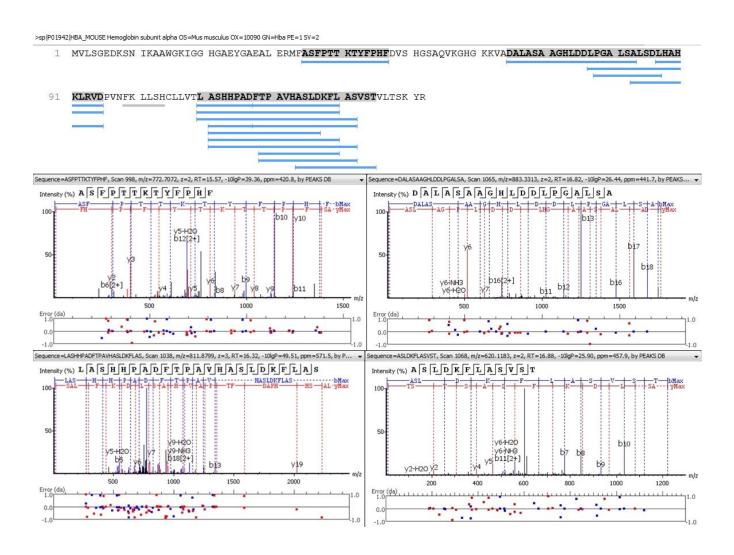


Figure S3: Deconvolution of three peptides from the fraction A3 (eluted at 81.8min) corresponding to the fragments 45-58, 76-104 and 106-147 of hemoglobin α chain

>tr |T1DQ28|T1DQ28 ANOAQ Putative hemoglobin subunit alpha (Fragment) OS=Anopheles aquasalis OX=42839 PE=2 SV=1

- 1 VLSGEDKSNI KAAWGKIGGH GAEYGAEALE RMFASFPTTK TYFPHFDVSH GSAQVKGHGK KVADALATAA GHLDDLPGAL SALSDLHAHK
- 91 LRVDPVNFKL LSHCLLVTLA SHHPADFTPA VHASLDKFLA SVSTVLTSKY R

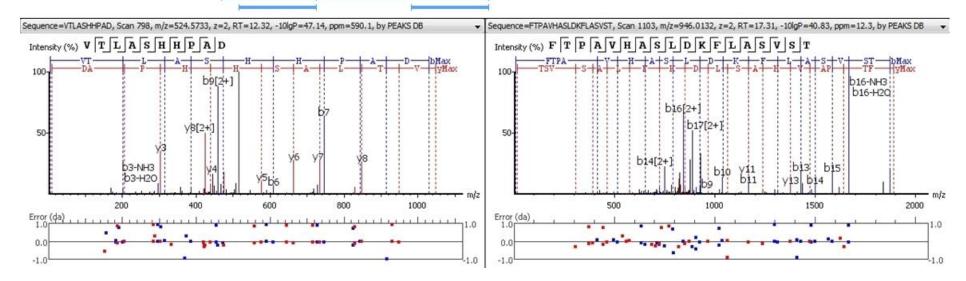


Figure S4: Deconvolution of two peptides from the fraction B1 (eluted at 28.28min) corresponding to the fragments 2-10 and 56-77 of hemoglobin β chain.

>tr |Q9QUN8 |Q9QUN8_MOUSE Beta-2-globin (Fragment) OS=Mus musculus OX=10090 GN=Hbb-b2 PE=2 SV=1 VHLTDAEKSA VSCLWAKVNP DAIGGEALGR LLVVYPWTQR YFDSFGDLSS ASAIMGNPKV KAHGKKVITA FNEGLKNLDN LKGTFASLSE

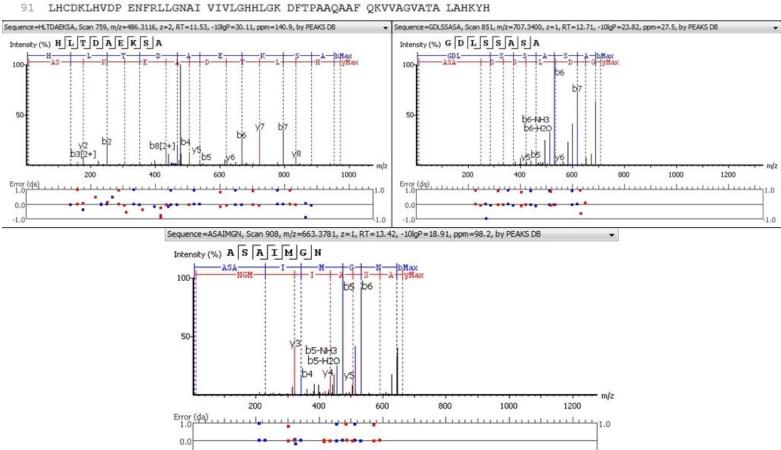


Figure S5: Deconvolution of five peptides from the fraction B2 (eluted at 28.28min) corresponding to the fragments 1-10, 16-27, 49-70, 73-80 and 122-136 of hemoglobin β chain.

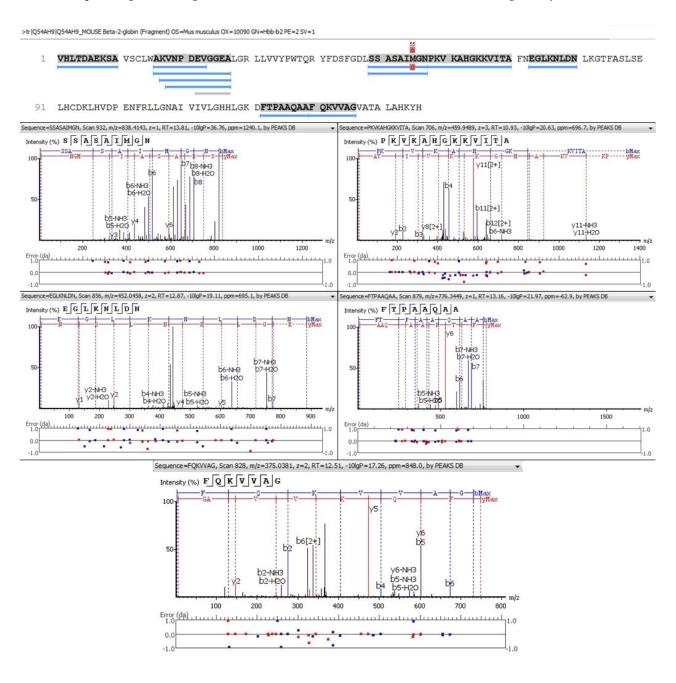


Figure S6: Deconvolution of three peptides from the fraction B3 (eluted at 43min) corresponding to the fragments 1-12, 58-72 and 112-129 of hemoglobin β chain.

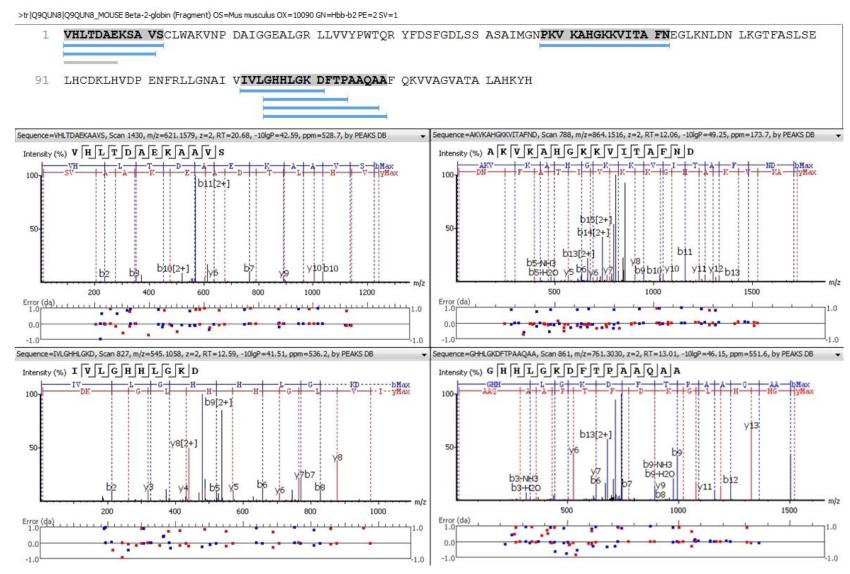


Figure S7: Deconvolution of three peptides from the fraction B4 (eluted at 48.1min) corresponding to the fragments 2-14, 59-88 and 135-147 of hemoglobin β chain.

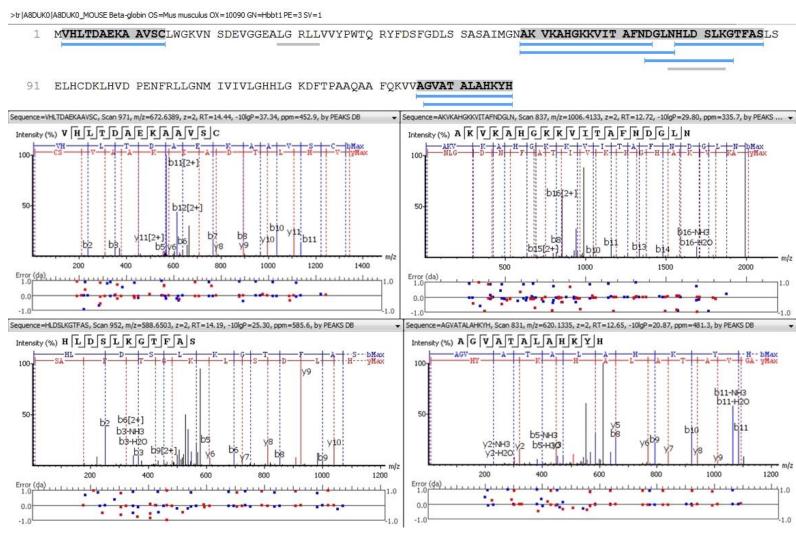


Figure S8: Deconvolution of four peptides from the fraction B5 (eluted at 56.4min) corresponding to the fragments 34-40, 59-71, 75-86 and 90-100 of hemoglobin β chain.

>tr |E9Q223|E9Q223_MOUSE Hemoglobin, beta adult s chain (Fragment) OS=Mus musculus OX=10090 GN=Hbb-bs PE=1 SV=1 MVHLTDAEKA AVSGLWGKVN ADEVGGEALG RLLVVYPWTQ RYFDSFGDLS SASAIMGNAK VKAHGKKVIT AFNDGLNHLD SLKGTFASLS ELHCDKLHVD PEN Sequence=VVYPWTQ, Scan 1077, m/z=893.4632, z=1, RT=16.24, -10lgP=19.73, ppm=1129.5, by PEAKS DB Sequence=AKVKAHGKKVITA, Scan 698, m/z=451.2678, z=3, RT=10.87, -10lgP=17.85, ppm=689.7, by PEAKS DB Intensity (%) V V Y P W T Q Intensity (%) AKVKAHGKKVITA y11[2+] y4+NH3 b11[2+] y4-H20 y5 b12[2+] 1000 1000 1500 1200 Sequence=GLNHLDSLKGTF, Scan 1025, m/z=651.4217, z=2, RT=15.41, -10lgP=32.20, ppm=116.4, by PEAKS DB Sequence=SELHCDKLHVD, Scan 860, m/z=433.0341, z=3, RT=13.15, -10lgP=22.32, ppm=1145.4, by PEAKS DB Intensity (%) SELHCDKLHVD Intensity (%) G L N H L D S L K G T F b11[2+] v6-NH3 v6-H20 y2-NH3 b10[2+ 66-NH3 V7 69b10-NH3 b10-H20 500 1000 1500 200 1200

Figure S9: Deconvolution of five peptides from the fraction B6 (eluted at 61.7min) corresponding to the fragments 2-15, 21-33, 90-100, 104-110 and 131-147 of hemoglobin β chain.

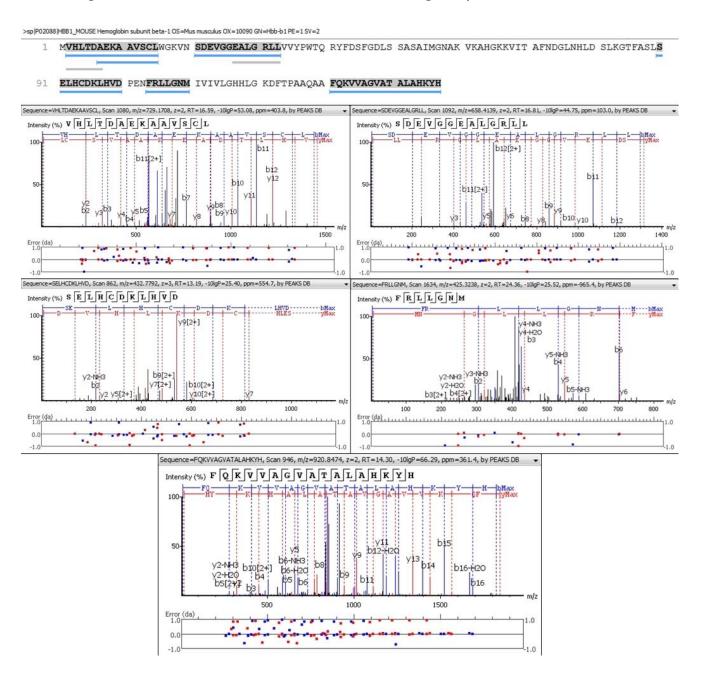


Figure S10: Deconvolution of two peptides from the fraction B2 (eluted at 93.7min) corresponding to the fragments 100-107 and 112-146 of hemoglobin β chain.

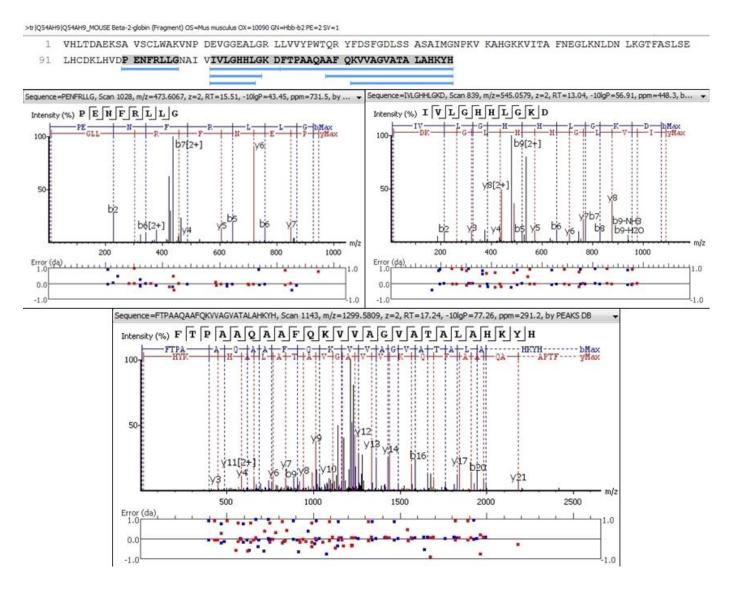


Figure S11: Deconvolution of the main peptide from the fraction A1 (eluted at 24.8min) corresponding to the fragment 2-10 of he moglobin α chain.

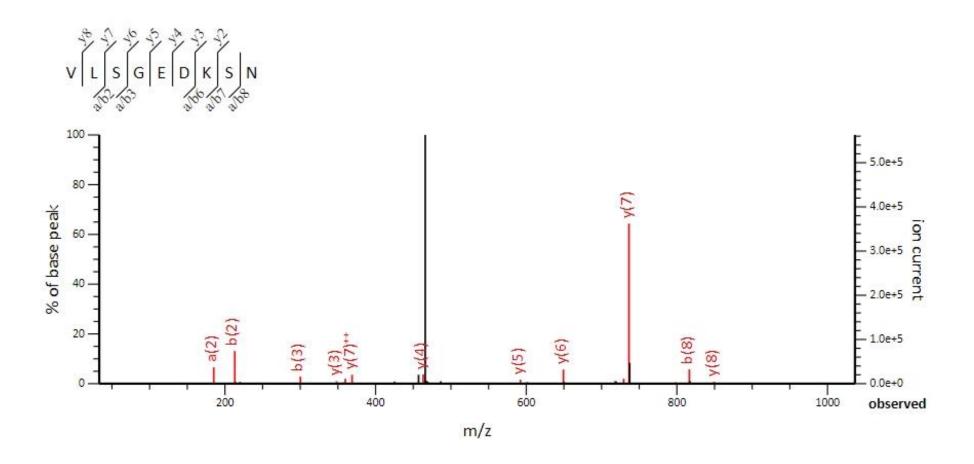


Figure S12: Deconvolution of the main peptide from the fraction A2 (eluted at 64.5 min) corresponding to the fragment 77-95 of he moglobin α chain.

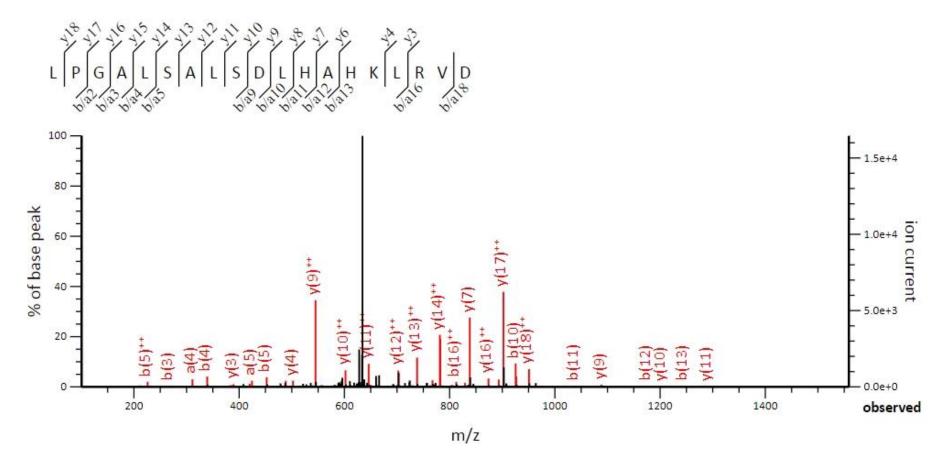
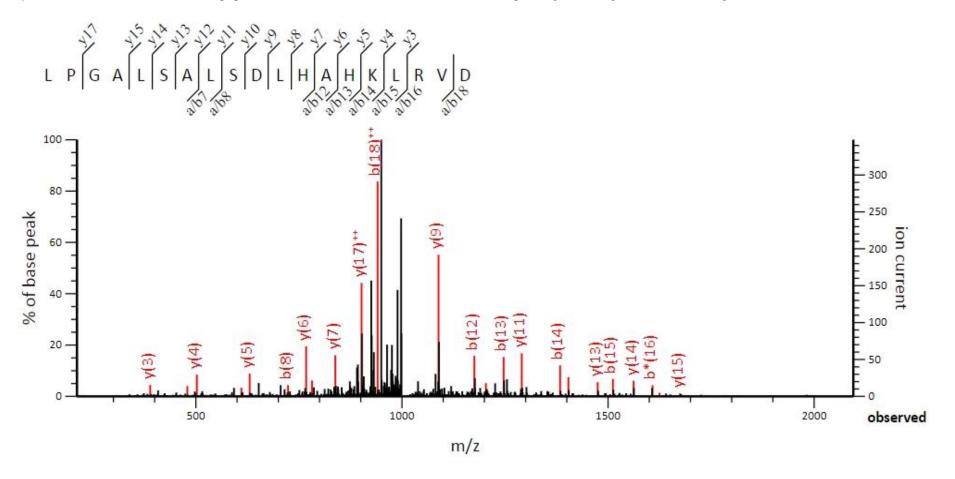


Figure S13: Deconvolution of the main peptide from the fraction A3 (eluted at 81.8 min) corresponding to the fragment 77-95 of he moglobin α chain.



 $\textbf{Figure S14:} \ \ Deconvolution \ of \ the \ main \ peptide \ from \ the \ fraction \ B1 \ (eluted \ at \ 28.8 \ min) \ corresponding \ to \ the \ fragment \ 2-10 \ of \ he \ moglobin \ \beta2 \ chain.$

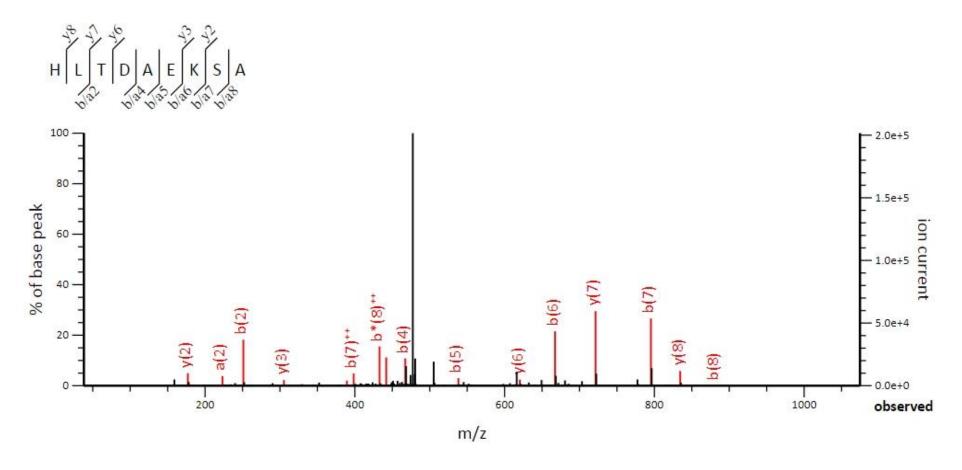


Figure S15: Deconvolution of the main peptide from the fraction B2 (eluted at 35.5 min) corresponding to the fragment 1-10 of hemoglobin β 2 chain.

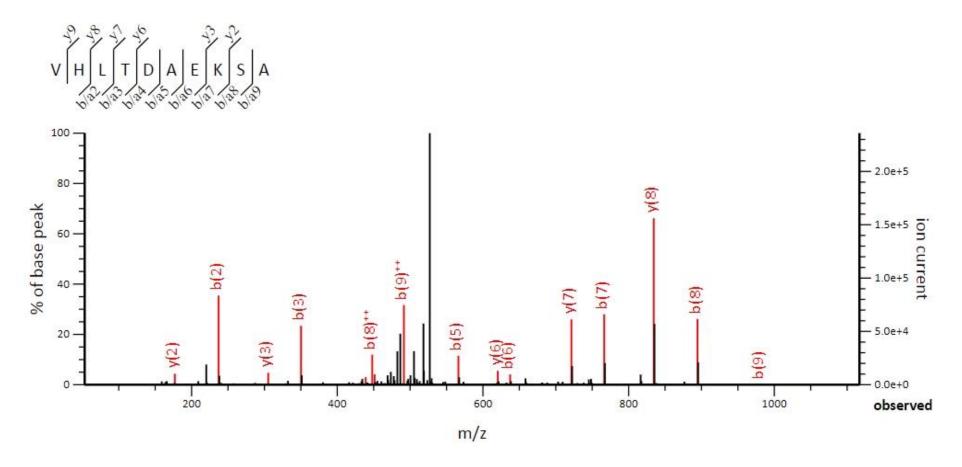


Figure S16: Deconvolution of the main peptide from the fraction B3 (eluted at 43.0 min) corresponding to the fragment 59-74 of he moglobin β 1 chain.

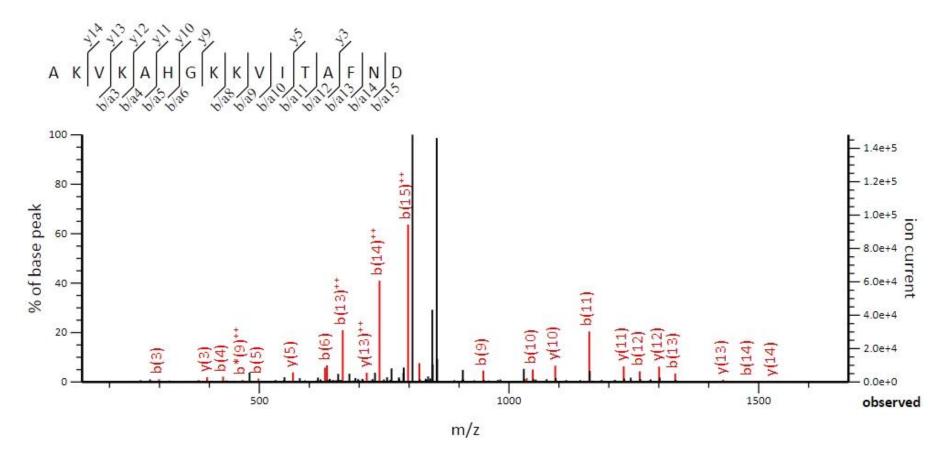


Figure S17: Deconvolution of the main peptide from the fraction B4 (eluted at 48.1 min) corresponding to the fragment 59-77 of he moglobin β 1 chain.

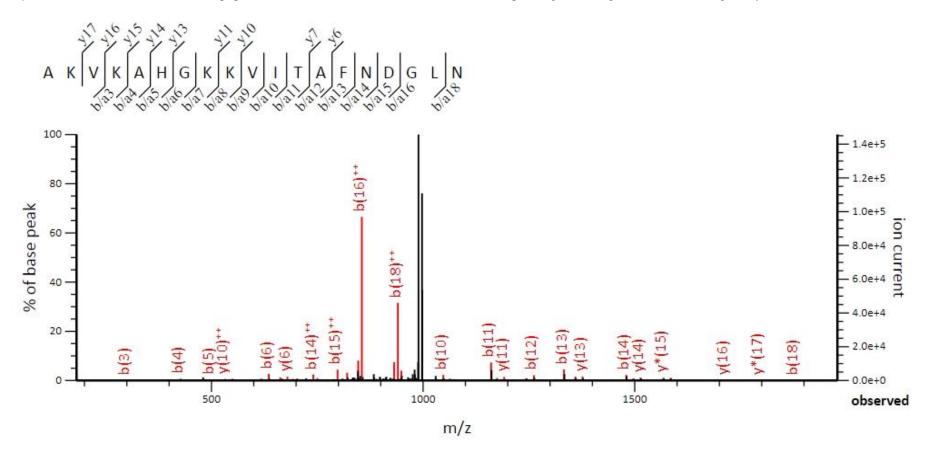


Figure S18: Deconvolution of the main peptide from the fraction B5 (eluted at 56.4 min) corresponding to the fragment 75-84 of he moglobin β 1 chain.

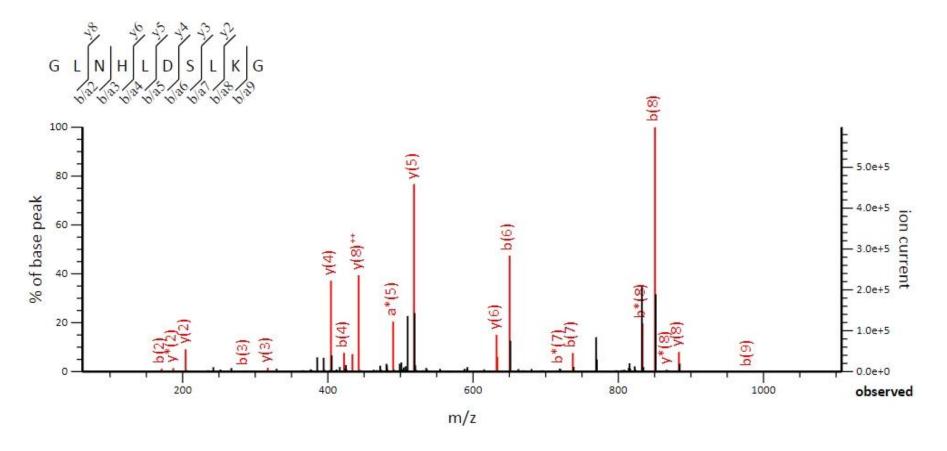


Figure S19: Deconvolution of the main peptide from the fraction B6 (eluted at 61.7 min) corresponding to the fragment 131-147 of he moglobin β 1 chain.

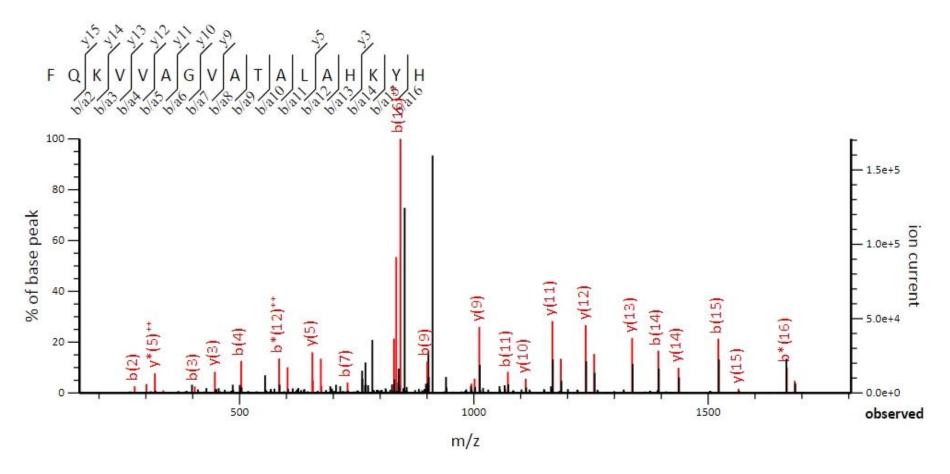


Figure S20: Deconvolution of the main peptide from the fraction B7 (eluted at 93.7 min) corresponding to the fragment 123-147 of he moglobin β 2 chain.

