

**S3 Table. Diagnostic ratios used in the 2<sup>nd</sup> tier MS/MS method, the mass transitions for their calculation, and the action values applied.**

<b>Ratio</b>	<b>Used mass transitions to calculate</b>	<b>Cutoff</b>
IS-Ratio	IS digested / IS intact	
HbS/HbA_1	HbS_bT1_y4_1 / HbA_bT1_y4_1	2,67
HbS/HbA_2	HbS_bT1_y7_2 / HbA_bT1_y7_2	3,17
HbC/HbA_1	HbC_bT1_b3_1 / HbA_bT1_y4_1	1,0
HbC/HbA_2	HbC_bT1_y5_2 / HbA_bT1_y7_2	1,0
HbE/HbA_1	H bE_bT3_y6_1 / HbA_bT3_y9_1	0,19
HbE/HbA_2	HbE_bT3_y7_1 / HbA_bT3_y8_1	0,19
HbD <sup>punj</sup> /HbA_1	HbD <sup>punj</sup> _bT13_b2_1 / HbA_bT13_b2_1	1,0
HbD <sup>punj</sup> /HbA_2	HbD <sup>punj</sup> _bT13_b3_1 / HbA_bT13_b3_1	1,0
HbO <sup>arab</sup> /HbA_1	HbO <sup>arab</sup> _bT13_y9_1 / HbA_bT13_y9_1	0,6
HbLep/HbA_1	HbLep dT2 y6 / HbA bT2 y6	
HbLep/HbA_2	HbLep dT2 y3 / HbA bT2 y6	
HbF/HbA_1	HbF_gT2_y06 / HbA_bT2_y06_1	
HbF/HbA_2	HbF_gT5_y04 / HbA_bT3_y8_1	
HbA/HbF_1	HbA_bT1_y7_2 / HbF_gT2_y06	
HbA/HbF_2	HbA_bT3_y8_1 / HbF_gT2_y06	