

Description of Additional Supplementary Files

File Name: Supplementary Data 1

Description: Zip file containing source FIX and optiFIX microscopic analysis full Z-stacks used for quantification in Fig. 6.

File Name: Supplementary Data 2

Description: Pairwise sequence alignment of full-length and predicted FH isoform based on experimentally verified transcript detected in RT-PCR.

File Name: Supplementary Data 3

Description: Pairwise sequence alignment of FH and optiFH.

File Name: Supplementary Data 4

Description: Amino acid sequences of full-length and predicted FH isoform (sequences used in Supplementary Data 2) based on experimentally verified transcript detected in RT-PCR without signal peptides.

File Name: Supplementary Data 5

Description: Nucleic acid sequences of FH and optiFH CDS including signal peptide (sequences used in Supplementary Data 3).

File Name: Supplementary Data 6

Description: Zip file containing source FH and optiFH microscopic analysis used in Supplementary Fig. 5.

File Name: Supplementary Data 7

Description: Nucleic acid sequences of FIX, aspFIX, and optiFIX CDS including signal peptide (sequences used in Supplementary Fig. 6).