Supplementary Table 1. Gene specific oligonucleotides used in PCR amplification

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| Primer | Sequence | Ta (ºC) |
| *Cloning* | | |
| Stf-1F | 5' - ATG ATG TGC GGC GGC TG - 3' |  |
| Stf-1R | 5' - AAA ATA TTG CAA TGC GTC CGT - 3' | 55 |
| Stf-2F | 5' - GAA ATG CTC GTG GGT GGT TA - 3' |
| Stf-2R | 5' - AGT GCA GGA TAC CCG AGT CGG - 3' |
| Stf-3F | 5' - ACG GAG AAA CGT TTG TGC - 3' |
| Stf-3R | 5' - TGA GGG ACA CTC GAC AGG - 3' |
| *RT-PCR* | | |
| FhStf-1F | 5´GGG AAC AGC TGG AAT CAC AT-3´ | 60 |
| FhStf-1R | 5´-CAG CTC CTG GAA GAT TCT GG-3´ |
| FhStf-2F | 5´-TCTCACAACTGGCTCTGTGG-3´ |
| FhStf-2R | 5´-ACGACAACTTCCCAACATCC-3´ |
| FhStf-3F | 5´-GAC GGT CGG GAA GTT TAA CA-3´ |
| FhStf-3R | 5´-GTA ACA CTT GGG GGC AAT TC-3´ |
| FhACT-F | 5' - GTG TTG GAT TCT GGT GAT GGT GTC -3'. |
| FhACT-R | 5' - CAA TTT CTC CTT GAT GTC TCG - 3' |

Supplementary Figure 1. ***In silico* analysis of FhStefins from *F. hepatica*.** A) Intron-exon structure of *F. hepatica* stefin genes. Boxes represent exons and lines introns. Numbers in boxes and lines show exons and introns sizes. B) Full length coding regions of the single domain stefin-like proteins identified in A), translated and aligned using MAFFT7 and MEGA7.0. C) Schematic representation of FhStefins, SP: signal peptide, QxVxG motif and cysteine residues in the mature proteins are highlighted.

Supplementary Figure 2. **Mass spectrometry analysis to confirm the identity of native Cystatin and recombinant FhStf-1, FhStf-2 and FhStf-3.** Native and recombinant FhStf-1,2 and 3 were trypsin-digested and peptides were analyzed by LC-MS/MS as described in materials and methods. Mascot results and matched peptides for (A) native cystatin, (B) FhStf-1, (C) FhStf-2 and (D) FhStf-3 are shown.