

## **Description of Additional Supplementary Files**

File Name: Supplementary Data 1

Description: Cleavage windows (New-born peptide terminals) produced by PRSS35 in 22 potential substrates.

File Name: Supplementary Data 2

Description: The detailed mass spectrum (MS) information of label-free proteomic analysis of the secreted protein profiles of human PLC liver cancer cells and human THLE3 hepatocytes.

File Name: Supplementary Data 3

Description: Mass spectrometry (MS) information of the small molecular bands detected by SDS-PAGE in Fig. 1d.