**Legends for supplementary figures**

Supplementary Fig. 1. Expression and purification of recombinant TsHLBPs. The recombinant proteins expressed in *E. coli* were purified by Ni-NTA affinity chromatography and analyzed by 15% reducing SDS-PAGE. Lanes U, non-induced *E. coli* lysates; I, 0.5 mM IPTG-induced cell lysates; P, elution fraction with 250 mM imidazole; IB, purified proteins were immunoblotted with anti-rTsHLBP2. CBB, Coomassie brilliant Blue G-250. *M*r, molecular masses in kDa. The blot probed with anti-rTsHLBP1 (1:2000 dilutions) also showed same reaction pattern.

Supplementary Fig. 2. *In vitro* binding of DAUDA to TsESP and rTsHLBPs. Fluorescence emission spectra (Exmax 350 and Emmax 497 nm) of DAUDA (10 µM) reacted with different concentrations of TsESP, rTsHLBP1 and rTsHLBP2 were observed.