Supplementary Material

Enzymatic Cleavage of Stx2a in the Gut and Identification of Pancreatic Elastase and Trypsin as Possible Main Cleavers

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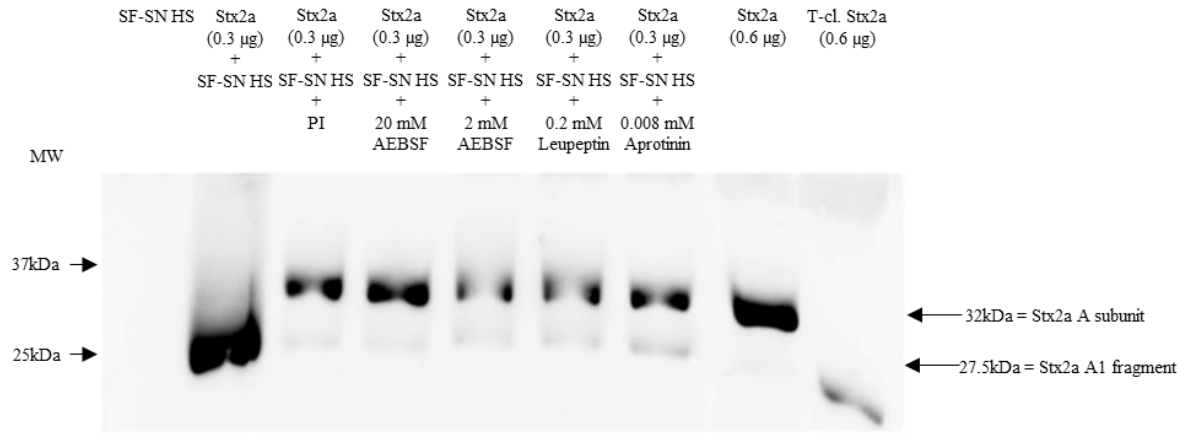

Figure S1. Structure of Shiga toxin 2a (Stx2a) after exposure to stool specimens of healthy individuals in presence of serine protease inhibitors. Immunoblots show the structure of Stx2a after its incubation (15 min) with sterile-filtered supernatant derived from human stool (SF-SN HS) with or without a protease inhibitor cocktail (PI), AEBSF (2 or 20 mM), Leupeptin (0.2 mM), Aprotinin (0.008 mM). Pure Stx2a and trypsin-cleaved (T-cl.) Stx2a served as references. Bands showcasing the whole A subunit or the A1 fragment of Stx2a are indicated by arrows. Molecular weight (MW) is indicated in kilodaltons (kDa) based the on migration of the molecular markers.

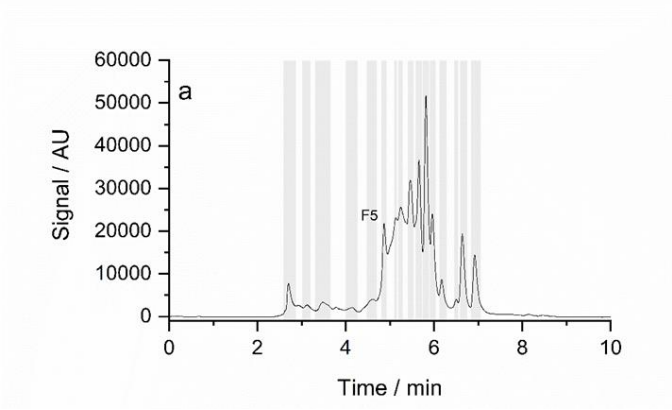

Figure S2. Chromatogram of human stool supernatant. Exemplary chromatogram of a fractionated stool supernatant sample. The collected fractions are highlighted in gray.

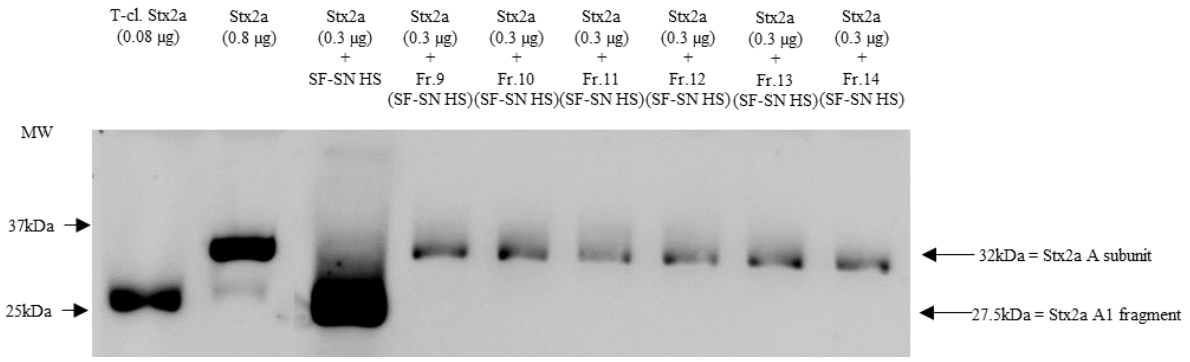

Figure S3. Structure of Shiga toxin (Stx) 2a after exposure to fractions of stool supernatant of healthy individuals. Immunoblots show the structure of Stx2a after its incubation (30 min) with selected fractions (3 to 8) of sterile-filtered supernatant derived from human stool (SF-SN HS). Pure Stx2a and trypsin-cleaved (T-cl.) Stx2a served as references. Bands associated with the whole A subunit or the A1 fragment of Stx2a are indicated by arrows. Molecular weight (MW) is indicated in kilodaltons (kDa) based the on migration of the molecular markers.