### 690 SUPPLEMENTARY MATERIAL

### 691 Figure S1. The AB<sub>5</sub> structure of cholera toxin

A ribbon diagram derived from the crystal structure of CT (PDB 1S5F) is presented, with the 21
kDa A1 subunit in dark blue, the 5 kDa A2 subunit in light blue, and the 55 kDa B
homopentamer in grey. The disulfide bond connecting CTA1 and CTA2 is highlighted in yellow.

### 696 Figure S2. Reduction of the CT holotoxin

697 CT incubated in the absence (lane 1) or presence (lane 2) of 1 mM GSH for 5 min at 30°C was 698 resolved by non-reducing SDS-PAGE and visualized with Coomassie stain. CT reduced with β-699 mercaptoethanol in the sample buffer was loaded as a reference in lane 3.

700

### 701 Figure S3. Heat denaturation of PDI

Thermal unfolding of PDI was studied by CD spectroscopy using a 1.0 mm path-length quartz cuvette. The protein (800 nM) was dissolved in an aqueous pH 7.0 buffer containing 20 mM sodium borate, 100 mM NaCl, and 1 mM GSH. The initial spectrum was measured at 30°C (dark blue). The sample was then heated to 90°C, incubated for 5 min, and a spectrum was recorded at that temperature (red). The temperature was then decreased to 23°C, and a last spectrum was recorded (light blue). All spectra have been corrected by subtraction of the buffer spectrum.

709

### 710 Figure S4. Glycerol does not inhibit the enzymatic activity of trypsin

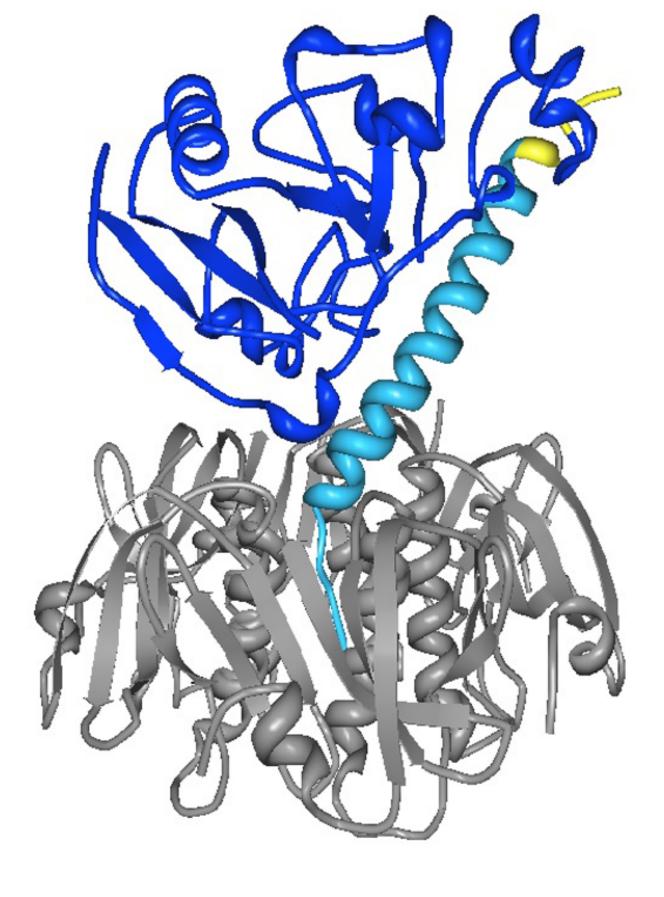
711 Alpha-casein was placed in 20 mM sodium phosphate buffer (pH 7.4) containing 1 mM GSH.

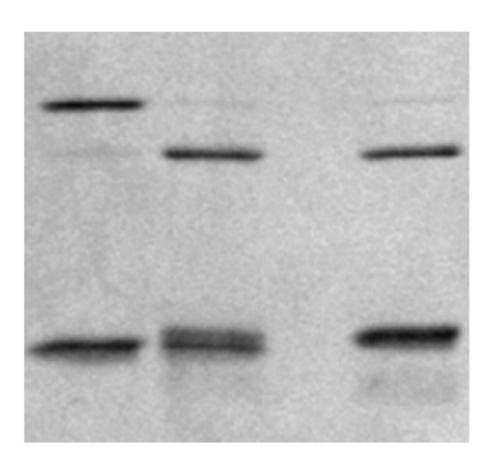
712 Protein samples (2 µg) were incubated for 1 h at 4°C in the absence or presence of trypsin before

- 713 visualization with SDS-PAGE and Coomassie stain. Samples exposed to trypsin were either
- vintreated or co-incubated with 10% glycerol as indicated.
- 715

### 716 Figure S5. Location of cut sites for thermolysin and trypsin in CTA1

- 717 Recognition sites for thermolysin and trypsin along the length of the CTA1 polypeptide were
- 718 identified with the ExPASy Peptide Cutter tool.
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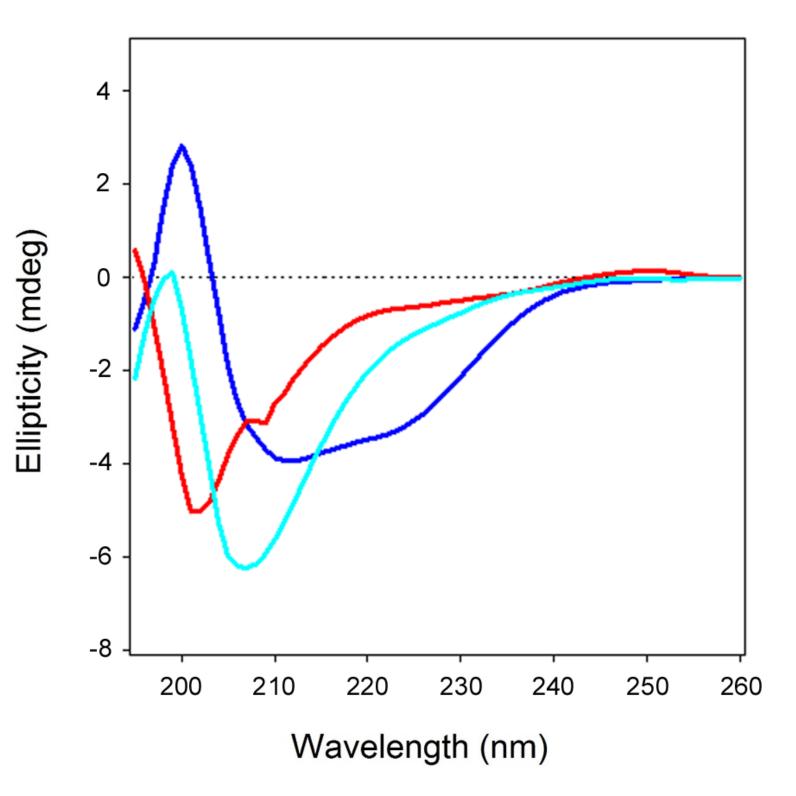
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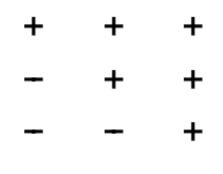
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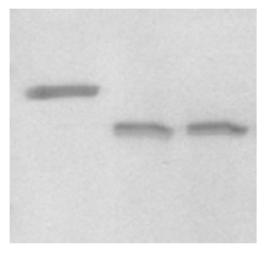
- CTA - CTA1

- CTB



### Casein Trypsin Glycerol





Casein
 Trypsin

