

# L-asparaginase conjugates from the hyperthermophilic archaea *Thermococcus sibiricus* with improved biocatalytic properties

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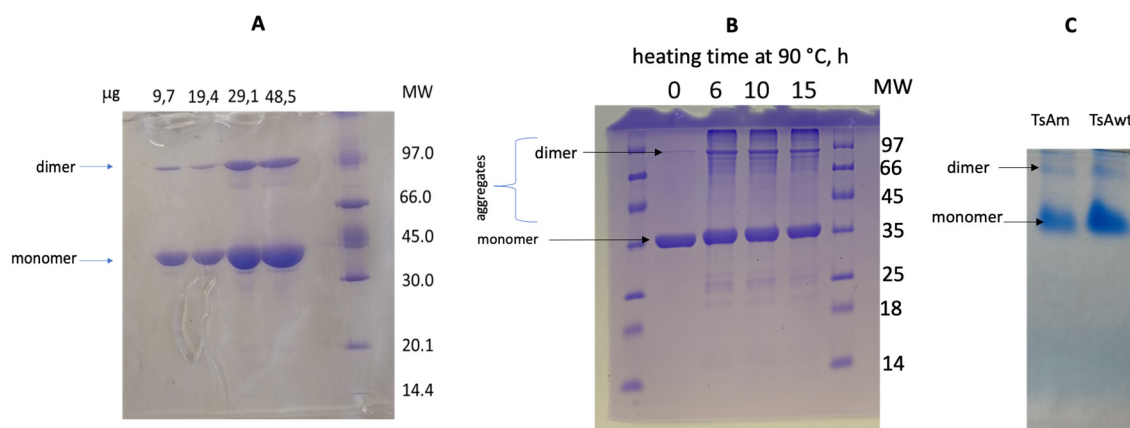
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## Content

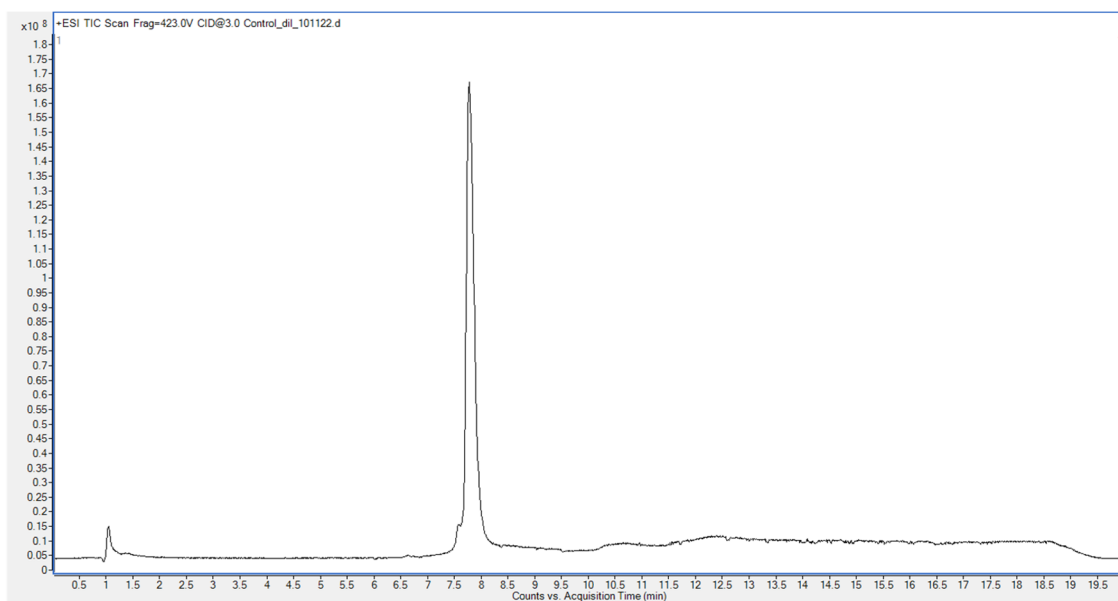
### 1. Figure S1. SDS-PAGE and native electrophoresis for the TsA enzyme.



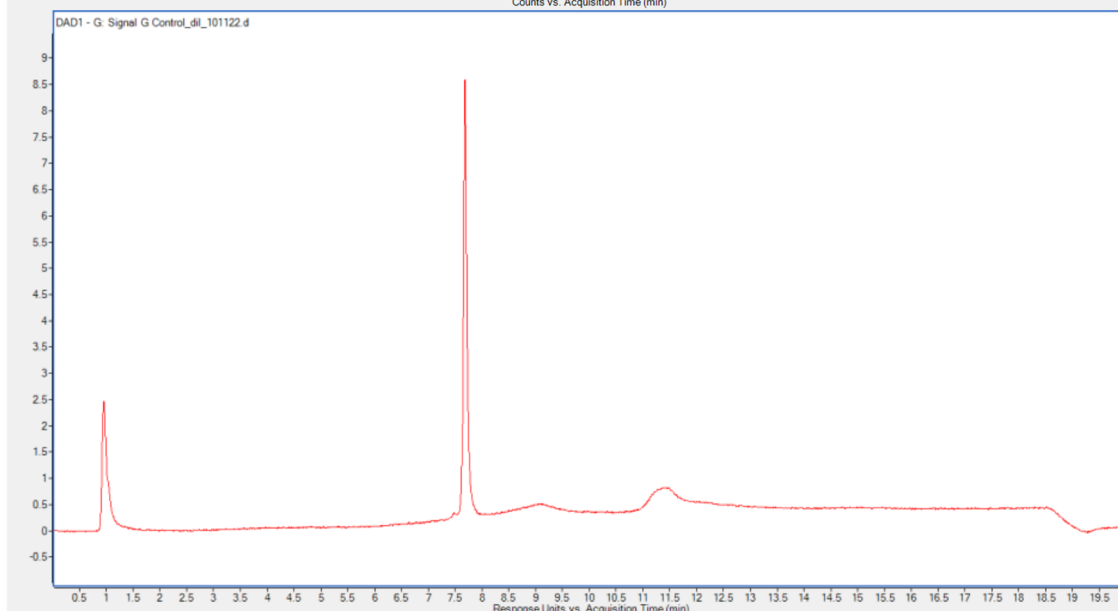
**Figure S1.** SDS-PAGE for the TsA enzyme with oxidised glutathione (A) and heating times at 90 °C (B). Native electrophoresis of wild-type TsA and the mutant (C).

### 2. Figure S2. TIC and UV chromatograms of TsA

**A**



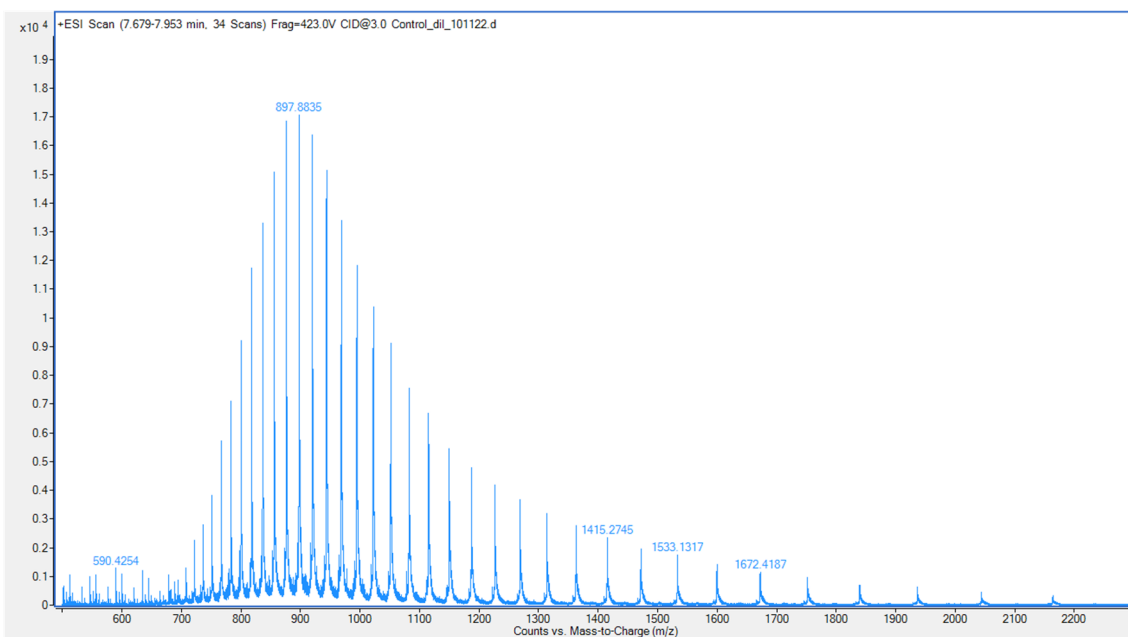
**B**



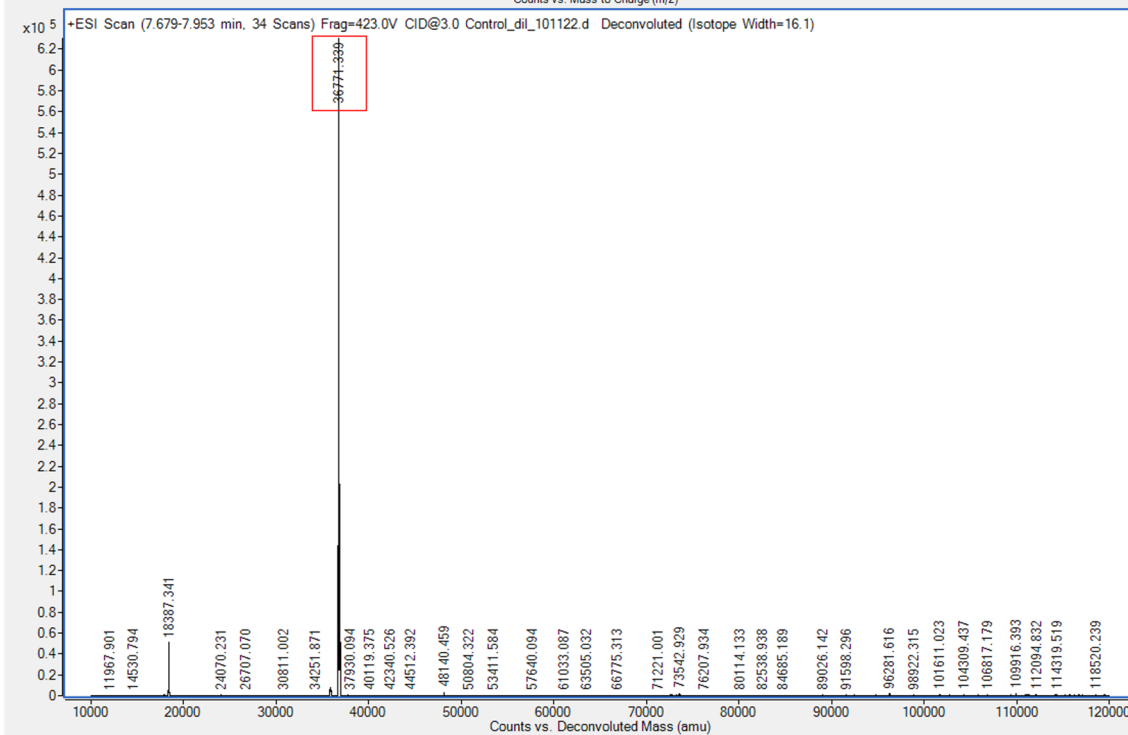
**Figure S2.** (A) Results of total ion current chromatogram (TIC chromatogram), 0.53 µg TsA; (B) UV chromatogram, 0.53 µg TsA, 280 nm.

3. Figure S3. Mass spectra of the TsA.

**A**

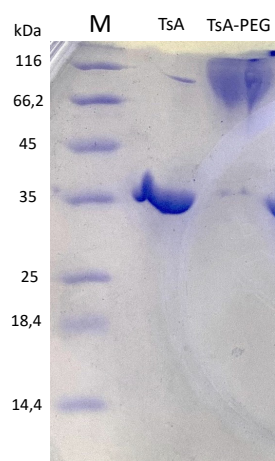


**B**



**Figure S3.** (A) Extracted mass spectrum of 0.53  $\mu$ g of TsA over a chromatography interval of 7.6 to 7.9 minutes; (B) Deconvolution of the extracted mass spectrum of 0.53  $\mu$ g of TsA over a chromatography interval of 7.6 to 7.9 minutes.

4. Figure S4. SDS-PAGE for TsA and TsA-PEG.



**Figure S4.** SDS-PAGE for TsA and TsA-PEG.