

## Recombinant Toxic Shock Syndrome Toxin-1 (TSST-1) from *Staphylococcus aureus*

Catalog #: **1402-001**

Lot #: **1812006**

**Description:** Recombinant TSST-1 expressed in *E. coli* and purified to >90% using chromatographic methods.

**Relevance:** TSST-1 is a pyrogenic toxin superantigen secreted by *Staphylococcus aureus*. TSST-1 is a powerful activator of T-lymphocytes resulting in substantial cytokine release that can cause severe pathological consequences.

rTSST-1 can be utilized as a control in ELISA and Western blot assays, as a potent mitogen, or as an activator of cytokines in Peripheral Blood Mononuclear Cells (PBMC).

**Storage:** 2-3 weeks at -20°C, -80°C long term

**Size:** 100 µg of protein is supplied in PBS at a concentration of 3.50 mg/mL. The theoretical molecular weight is 22,204 Daltons.

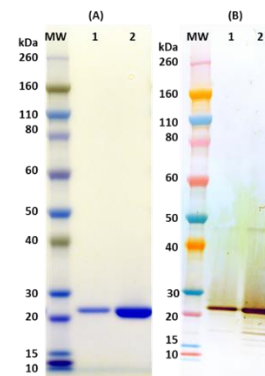
### Recommended Use and Dilutions:

**ELISA:** Assay-dependent dilution

**WB:** Assay-dependent dilution

**PBMC Stimulation assay:** Stimulation of PBMCs using rTSST-1 generates Interferon γ.

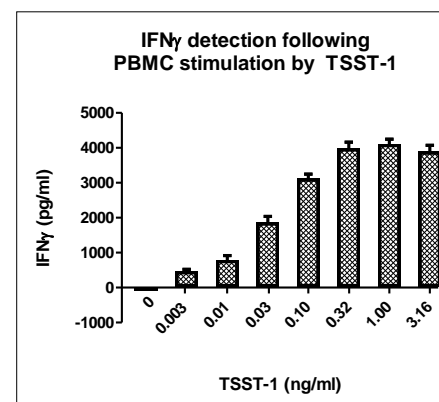
### SDS-PAGE and Western Blot Detection



(A) SDS-PAGE of rTSST-1 at 1 µg and 5 µg (lanes 1 and 2, respectively)

(B) Western Blot detection of rTSST-1 at 100 ng (lane 1) and 500 ng (lane 2) using IBT's polyclonal rabbit anti-*Staphylococcus aureus* Superantigen antibody (cat# 0311-001) at 0.5 µg/mL and an anti-rabbit IgG HRP conjugate, followed by TMB substrate.

### PBMC Stimulation Assay



Interferon  $\gamma$  was detected from PBMCs by ELISA following 48-hour incubation of PBMCs with varying amounts of TSST-1.

For additional *S. aureus* products, please visit:  
<http://www.ibtbioservices.com/reagents/staphylococcus/>

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