

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

Catalog #: 1402-001

Lot #: 1201002

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 + 10% Glycerol at a concentration of 1.3 mg/mL. The theoretical molecular weight of the TSST-1 is 22,204 Daltons.

Recommended Use and Dilutions:

ELISA: Assay-dependent dilution

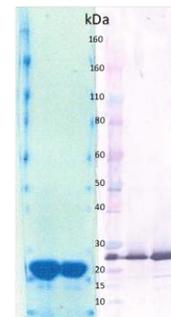
WB: Assay-dependent dilution; internal QC demonstrates strong detection of 1 ng of TSST-1.

PBMC Stimulation assay: Stimulation of PBMCs to produce Interferon γ by TSST-1 can be achieved with 0.1 ng/mL.

Intended for research use only. Not for human, therapeutic, diagnostic, or other applications.

Please review the Material Safety Data Sheet for information pertaining to the toxin hazards and safe handling practices. IBT assumes no liability in the use of these products.

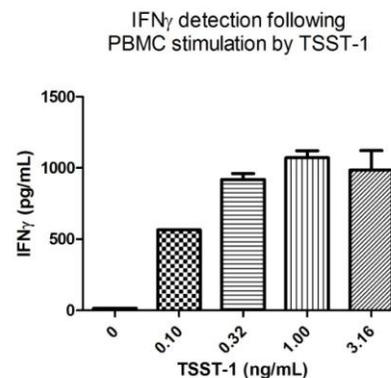
SDS-PAGE and Western Blot Detection



(A) (B)

SDS-PAGE and staining results for TSST-1 (A) at 11 µg and 5 µg respectively. Western blot detection (B) of 100 and 500 ng of TSST-1 respectively using IBT's polyclonal rabbit anti-*Staphylococcus aureus* Superantigen antibody at 0.5 µg/mL followed by an anti-rabbit alkaline phosphatase conjugate and visualized with AP substrate.

PBMC Stimulation Assay



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

Related Products:

Anti- *S. aureus* Superantigens Polyclonal Antibody
Catalog #0311-001

Anti- *S. aureus* LukS-PV Monoclonal Antibody
Catalog #0221-001

Anti- *S. aureus* Alpha-Hemolysin Polyclonal Antibody
Catalog # 04-0010