

# Recombinant Staphylococcal Enterotoxin K (SEK)

## Catalog #: 0532-001

## Lot #: 1907001

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

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

rSEK can be utilized as a control in ELISA and Western blot assays. rSEK can also be used 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**  $\mu$ g of protein is supplied in in sodium phosphate buffer containing sodium chloride and 5% glycerol, at a concentration of **1.45** mg/mL. The theoretical molecular weight is 25,326 Daltons.

#### **Recommended Use and Dilutions:**

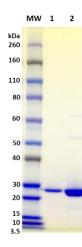
ELISA: Assay-dependent dilution

WB: Assay-dependent dilution

**PBMC Stimulation assay:** Stimulation of PBMCs using rSEK generates Interferon γ.

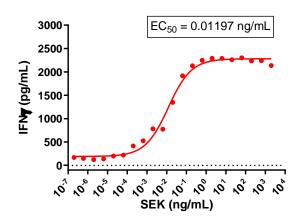
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### **SDS-PAGE**



SDS-PAGE of rSEK at 1  $\mu g$  and 5  $\mu g$  (lanes 1 and 2, respectively) when tested under reducing condition.

#### **PBMC Stimulation Assay**



Interferon  $\gamma$  was detected from human PBMCs by ELISA following 48-hour incubation of PBMCs with varying amounts of TSST-1. Data shown in the graph above, represent the average Interferon  $\gamma$  value from four PBMC donors.

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

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