



IBT BIOSERVICES

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S. aureus recombinant LukE

Catalog #: 0530-004

Lot #: 1503005

Description: Purified, *Staphylococcus aureus* recombinant leukocidin-E (rLukE). The rLukE (tag free) is expressed in *E. coli* and purified by FPLC. The theoretical molecular weight of the protein is 34,819 Daltons.

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

Size: 100 µg of protein is supplied in PBS at a concentration of **2.417 mg/mL**. Protein demonstrates a molecular weight of approximately 35 kDa.

Relevance: This protein may be used in functional toxicity assays in combination with rLukD, or as a control protein in ELISA assays or Western blotting when detecting toxins produced by different strains of *S. aureus*.

Recommended Dilutions:

ELISA: Assay-dependent dilution.

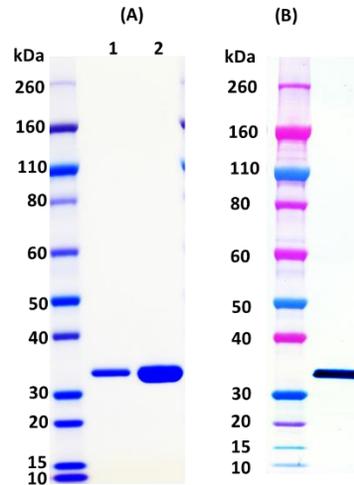
WB: Assay-dependent dilution; internal QC demonstrates detection of 100 ng of rLukE protein using anti-LukS-PV polyclonal antibody (cat# 04-0009) by Western blot analysis.

Cytotoxicity assay: Cytotoxicity can be detected in human neutrophils when used in combination with rLukD in a concentration range of 25-800 nM.

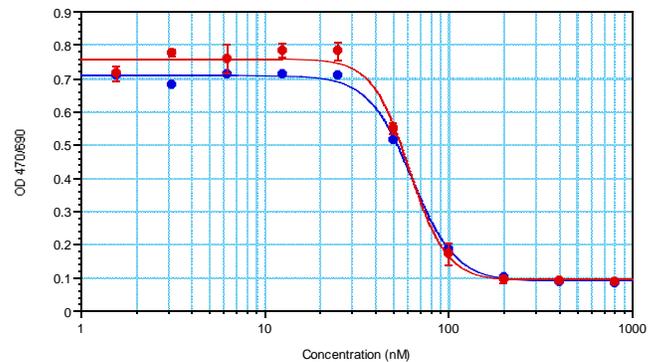
For additional *S. aureus* products, please visit:

<http://ibtbioservices.com/index.php/product-and-reagents/staphylococcal-products>

SDS-PAGE and Western Blot Detection



A) SDS-PAGE of rLukE: 1 µg (lane 1) and 5 µg (lane 2). (B) Western blot detection of rLukE at 100 ng, using IBT's anti-LukS-PV polyclonal antibody (Cat#04-0009) at 0.5 µg/mL and an anti-rabbit IgG-HRP conjugate, followed by substrate.



Toxin Functionality: Human promyelocytic leukemia cell line HL60 was differentiated into neutrophils by treatment with DMSO. Neutrophils were incubated with serial dilutions of rLukE and rLukD at equimolar concentration for 3 hours at 37°C with 5% CO₂ and 95% humidity. Cellular viability was determined by adding XTT and incubation for additional 16 hours. Cells were centrifuged and the OD determined in the supernatants at 470/690 nm. EC₅₀ values were found to be 62.6 nM for the current lot 1503005 (blue circles) and 60.7 nM for the previous lot 1310002 (red circles).

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

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