

S. aureus recombinant LukE

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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 μ g 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.

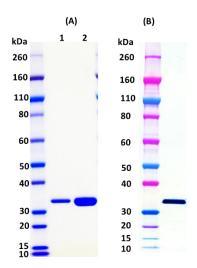
WB: Assay-dependent dilution; internal QC demonstrates detection of 100 ng of rLukE protein using anti-LukS-PV polyclonal antibody (cat# 04-0009) by Western blot analysis.

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

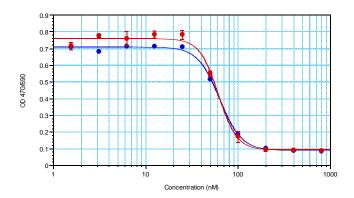
For additional *S. aureus* products, please visit:

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

SDS-PAGE and Western Blot Detection



A) SDS-PAGE of rLukE: 1 μ g (lane 1) and 5 μ g (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 μ g/mL and an antirabbit 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).