

## **S. aureus recombinant LukD (tag free)**

**Catalog No: tcip3017**



### **Available Sizes**

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**Size:** 100µg

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### **Specifications**

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**Application:**

ELISA, WB, Cytotoxicity

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**Research Area:**

Virology

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**Form:**

Frozen Liquid

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**Concentration:**

Supplied in PBS at a concentration of 2.224 mg/mL. Protein demonstrates a molecular weight of approximately 37 kDa. ; Endotoxin: 4.232 Endotoxin units/mg

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**Recommended Dilution:**

ELISA: Assay-dependent dilution. ; WB: Assay-dependent dilution; internal QC demonstrates detection of 100 ng of rLukD protein using anti-PVL LukF polyclonal antibody (cat# tcia158) in Western blotting. ; Cytotoxicity assay: Cytotoxicity can be detected in human neutrophils when used in combination with LukE.

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**Purity / Grade:**

Column chromatography

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**Storage Instruction:**

2-3 weeks at -20°C, -80°C long term

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**Relevance:**

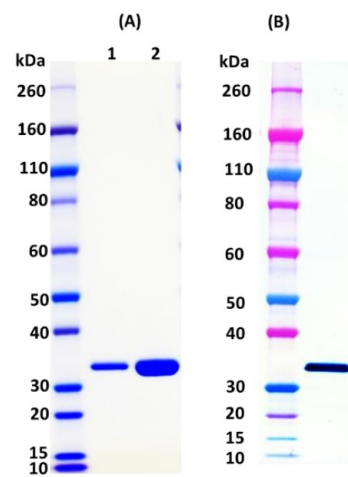
This protein may be used in functional toxicity assays in combination with rLukE, or as a control protein in ELISA assays or Western blotting when detecting toxins produced by different strains of S. aureus.

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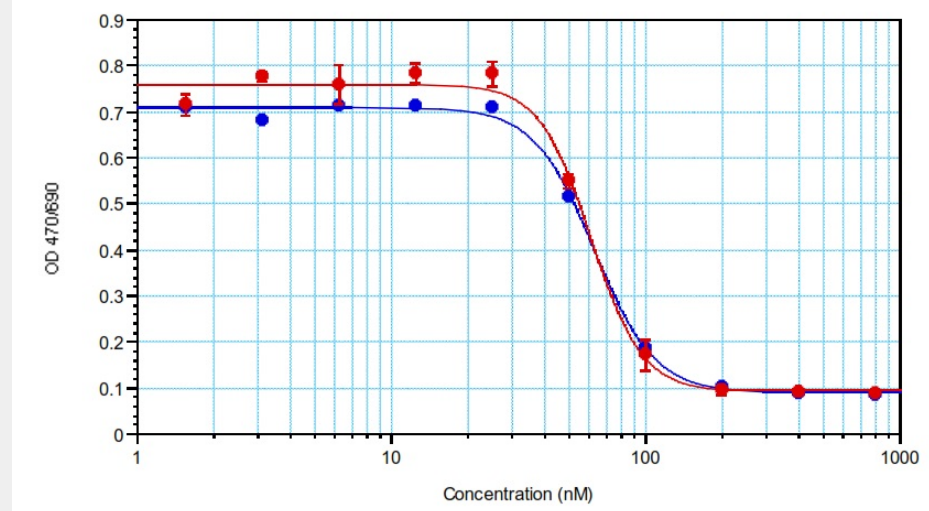
### **Product Description**

Purified, *Staphylococcus aureus* recombinant leukocidin-D (rLukD). The rLukD (tag free) is expressed in *E. coli* and purified by FPLC. The theoretical molecular weight of the protein is 36,889 Daltons.

SDS-PAGE and Western Blot Detection



A) SDS-PAGE of rLukE: 1 µg (lane 1) and 5 µg (lane 2). ; (B) Westernblot detection of rLukE at 100 ng, using Taiclone's anti-LukS-PV polyclonal antibody (Cat# tcia174) at 0.5 µg/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% CO<sub>2</sub> 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. EC<sub>50</sub> 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).

All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!