



IBT BIOSERVICES

4 Research Court, Suite 300
Rockville, MD 20850
877-411-2041
Services@ibtbioservices.com

S. aureus LukF-PV (tag-free)

Catalog #: 0540-002

Lot #: 1710006

Description: Purified, recombinant *Staphylococcus aureus* Panton-Valentine Leukocidin (PVL) F subunit (LukF-PV). The theoretical molecular weight of the protein is 34,580 Daltons.

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

Size: 100 µg of protein is supplied in sodium phosphate buffer containing sodium chloride and 5% glycerol, at a concentration of 1.624 mg/mL.

Relevance: This protein may be used in functional PVL toxicity assays in combination with LukS-PV, or as a control protein in ELISA assays or Western blotting when detecting LukF in PVL (+) strains of *S. aureus*.

Recommended Dilutions:

ELISA: Assay-dependent dilution.

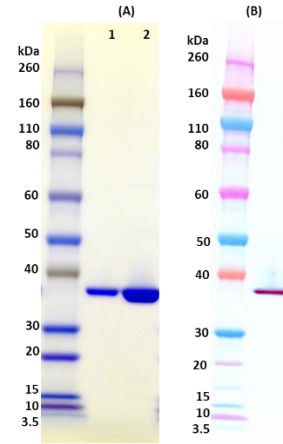
WB: Assay-dependent dilution; internal QC demonstrates detection of 100 ng of LukF-PV protein when detected with anti-PVL LukF polyclonal antibody (cat# 0312-002) in Western blotting.

PVL Cytotoxicity assay: Cytotoxicity can be detected in human neutrophils when used in combination with LukS-PV (cat# 0540-001) in a concentration range of 1-100 nM.

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

<http://www.ibtbioservices.com/reagents/staphylococcus/>

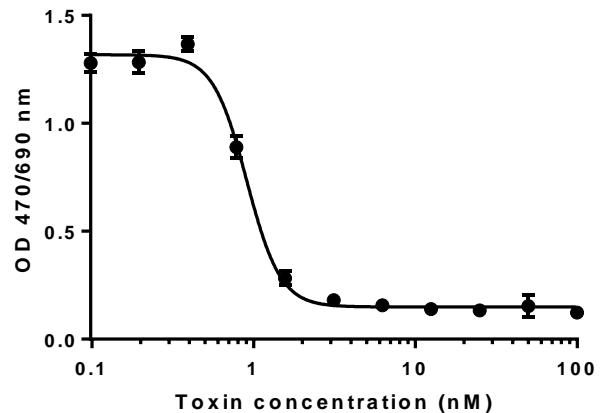
SDS-PAGE and Western Blot Detection



(A) SDS-PAGE of LukF-PV: 1 µg (lane 1) and 5 µg (lane 2) Protein demonstrates a molecular weight of approximately 37 kDa.

(B) Western blot detection of LukF-PV at 100 ng, using IBT's anti-LukF-PV polyclonal antibody (Cat: 0312-002) at 0.5 µg/mL and an anti-rabbit IgG-HRP conjugate, followed by TMB substrate.

Toxin Functionality



Human promyelocytic leukemia cell line HL60 was differentiated into neutrophils by treatment with DMSO. Neutrophils were incubated with serial dilutions of LukF-PV and LukS-PV at equimolar concentration for 3 hours at 37°C with 5% CO₂ and 95% humidity. Cellular viability was determined by adding XTT and incubating for additional 16 hours. Cells were centrifuged and the OD determined in the supernatants at 470/690 nm. EC₅₀ values were found to be 0.907 nM.

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

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