



IBT BIOSERVICES

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S. aureus LukF-PV (tag-free)

Catalog #: 0540-002

Lot #: 1503009

Description: Purified, *Staphylococcus aureus* Panton-Valentine Leukocidin (PVL) F subunit (LukF-PV). The theoretical molecular weight of the protein is 35,580 Daltons.

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

Size: 100 ug of protein is supplied in PBS at a concentration of 2.994 mg/mL. Protein demonstrates a molecular weight of approximately 37 kDa.

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.

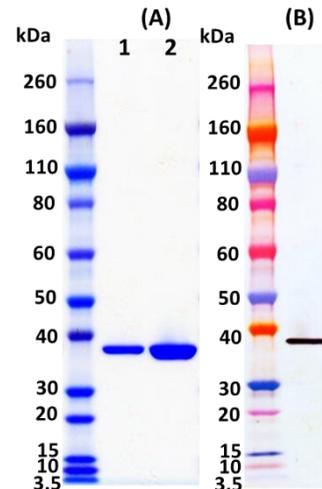
WB: Assay-dependent dilution; internal QC demonstrates detection of 100 ng of LukF-PV protein when detected with anti-PVL LukF polyclonal antibody (cat: 0312-002) in Western blotting.

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

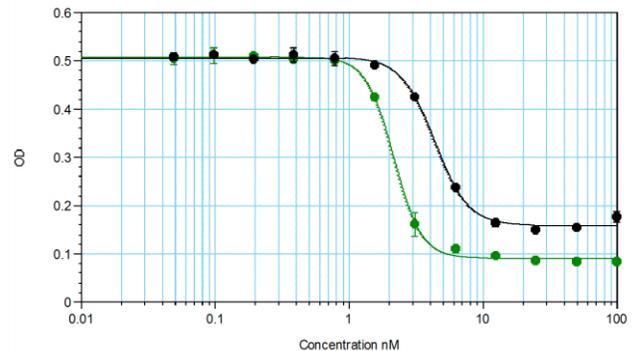
For additional *S. aureus* products, please visit:

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

SDS-PAGE and Western Blot Detection



A) SDS-PAGE of LukF-PV: 1 µg (lane 1) and 5 µg (lane 2). (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 2.16 nM for the LukF-PV tag-free lot 1503008 (green circles) and 4.38 nM for the LukF-PV his-tag lot 1108004 (black circles).

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

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