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S. aureus Gamma Hemolysin C (Hlg C) (tag-free)

Catalog #: 1405-001

Lot #: 1509003

Description: Purified, tag-free *Staphylococcus aureus* Gamma Hemolysin C (Hlg C) expressed in *E. coli*. The theoretical molecular weight of the protein is 32.8 kDa.

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

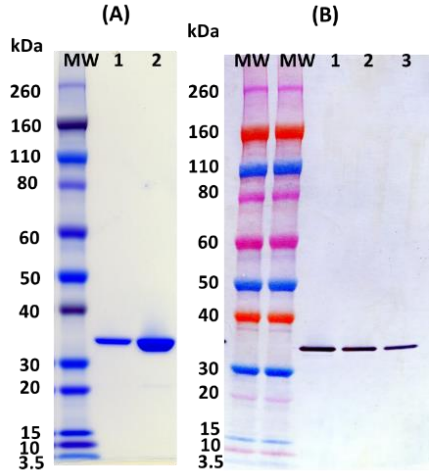
Size: 100 µg of protein is supplied in PBS + 5% Glycerol at a concentration of **1.496 mg/mL**. Protein demonstrates a molecular weight running close to 30 kDa.

Relevance: This protein may be used in functional toxicity assays in combination with Hlg B, or as a control protein in ELISA assays or Western blotting.

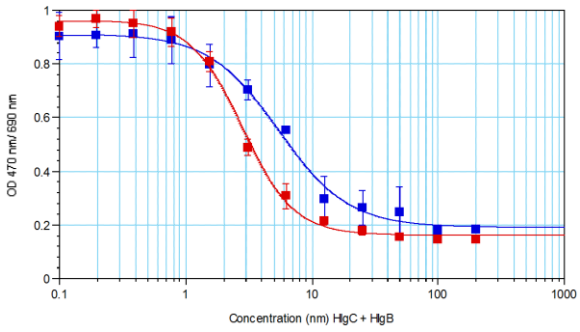
Cytotoxicity assay: Cytotoxicity can be detected in human neutrophils when used in combination with Hlg B in a concentration range of 0.03-200 nM.

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 and stain demonstrating 1 µg and 5 µg (lanes 1 and 2, respectively) of Hlg C protein under denaturing and reducing conditions. MW denotes Novex Sharp prestained protein markers. (B) Western blot detection of Hlg C at 100 ng, 50 ng, and 25 ng (lanes 1-3). Hlg C was detected using IBT's polyclonal antibody at 500 ng/mL and anti-rabbit IgG-horseradish peroxidase (HRP) conjugate, followed by TMB substrate.



Toxin Functionality: Human promyleocytic leukemia cell line HL60 was differentiated into neutrophils by treatment with DMSO. Neutrophils were incubated with serial dilutions of Hlg B tag-free and Hlg C at equimolar concentration for 3 hours at 37°C with 5% CO_2 and 95% humidity. Cellular viability was determined by adding XTT and incubation for additional 16 hours. OD's were determined in the supernatants at 470/690 nm. Red squares represent the current lot of HIgC tag-free (1509003) and blue square represents the previous HIgC his-tag (Cat # 1403-002, Lot# 1211003). EC_{50} was found to be 2.84 nM for current lot and 5.53 nM for HIgC his-tag (Cat # 1403-002, Lot# 1211003).