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## Staphylococcus aureus Phenol Soluble Modulin-Alpha 3 (PSM-α3)

Catalog #: 1401-004

Lot #: 2306001

**Description:** Purified *Staphylococcus aureus* phenol soluble modulin (PSM- $\alpha$ 3) peptide.

**Supplied:** 100  $\mu$ g is supplied in ultra-pure water at a concentration of 2.00 mg/mL.

Storage: -70°C

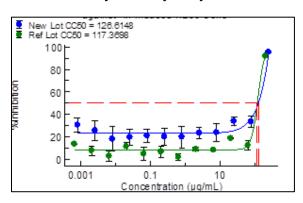
**Relevance:** *S. aureus* secretes four short ( $\sim$ 20 amino acids)  $\alpha$ -type phenol soluble modulins of which the PSM- $\alpha$ 3 plays the most prominent role in *S. aureus* virulence. PSM toxin is a major virulence factor of *S. aureus* and primarily causes cytolysis in red and white blood cells.

## **Recommended Dilutions:**

**ELISA:** Assay-dependent dilution. The peptide can also be used in serology assay as coating antigen to detect antibodies to PSM.

**WB:** Not recommended for this peptide.

## Cytotoxicity assay:



The peptide is active in functional lysis assays with horse red blood cells (data not shown) and human neutrophils. Human promyelocytic leukemia cell line HL-60 was differentiated into neutrophils by treatment with DMSO. Neutrophils were incubated with serial dilutions of PSM- $\alpha 3$  for 3 hours at 37°C with 5% CO2 and 95% humidity. Cellular viability was determined by CellTiter-Glo® Luminescent Cell Viability Assay. The half maximal cytotoxic concentration (CC50) for this lot 2306001 was found to be 127  $\mu g/mL$  which is comparable to 117  $\mu g/mL$  CC50 of the previous lot 2106002.

For additional *S. aureus* products, please visit: http://www.ibtbioservices.com/reagents/staphylococcus/

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