

Sushi Peptide S3, bacterial recombinant protein
Factor C Sushi 3, Sushi 3
Catalog # PBV11213r**Specification**

Sushi Peptide S3, bacterial recombinant protein - Product infoCalculated MW **16.1 kDa KDa****Sushi Peptide S3, bacterial recombinant protein - Additional Info****Other Names**

Factor C Sushi 3, Sushi 3

Gene Source

E. Coli

Source

E. coli

Assay&Purity

SDS-PAGE; ≥90%

Assay2&Purity2

N/A;

Recombinant

Yes**Application Notes**

Reconstitute with water. Recommended conc: 0.1 - 1 mg/ml.

Format

Lyophilized powder

Storage

-20°C; Lyophilized from 50 mM Tris. HCl and 100 mM NaCl (pH 8.0)

Sushi Peptide S3, bacterial recombinant protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Sushi Peptide S3, bacterial recombinant protein - Images**Sushi Peptide S3, bacterial recombinant protein - Background**

Biovision's Sushi Peptide S3 is a trimer of one of the high endotoxin-binding domains, Sushi 3 (or S3) within Factor C, a lipopolysaccharide (LPS)-sensitive serine protease of the horseshoe crab (*Limulus Polyphemus*). S3 display detergent-like properties in disrupting LPS aggregates, with specificity for palmitoyl-oleoyl-phosphatidylglycerol (POPG) resulting from electrostatic and hydrophobic forces between the peptides and the bacterial lipids. During interaction with POPG, the

S3 resumes a mixture of alpha-helix and beta-sheet structures. The unsaturated nature of POPG confers fluidity and enhances insertion of the peptides into the lipid bilayer, causing maximal disruption of the bacterial membrane. In short, peptide S3 can bind to lipopolysaccharide (LPS) and inhibit the growth of Gram-negative bacteria without affecting mammalian cells. It has been shown that endotoxin activates Factor C-based catalytic coagulation cascade resulting in the gelation of Limulus blood. This process is the basis of Limulus Amebocyte Lysate (LAL) endotoxin detection method.