Lipopolysaccharides from *Shigella flexneri* serotype 3A

Catalog Number L3545
Storage Temperature 2–8 °C

**Product Description**
This product is a lyophilized phenol extract from *Shigella flexneri* serotype 3A containing lipopolysaccharides with <2% protein. This serotype has been used in investigating new strategies for shigellosis vaccine.

Lipopolysaccharides are characteristic components of the cell wall of Gram-negative bacteria; they are not found in Gram-positive bacteria. They are localized in the outer layer of the membrane and are, in noncapsulated strains, exposed on the cell surface. Lipopolysaccharides are made up of a hydrophobic lipid (lipid A, which is responsible for the toxic properties of the molecule), a hydrophilic core polysaccharide chain, and a hydrophilic O-antigenic polysaccharide side chain.

*Shigella flexneri* is a human pathogen causing endemic bacillary dysentery. *Shigella flexneri* is divided into 14 serotypes based on the structure of the O antigen. Modification of the basic O antigen occurs through glucosylation and/or O-acetylation of one or more sugars within a repeating tetrasaccharide unit.

Potency: ≥500,000 EU/mg

**Precautions and Disclaimer**
This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

**Preparation Instructions**
The product is soluble in water or culture medium (5 mg/ml), yielding a hazy solution.

**Storage/Stability**
Store the product at 2–8 °C.

**Reference**