



## Product Datasheet

<b>Product Name</b>	Limulus Antilipopolysaccharide Factor Recombinant
<b>Cata No</b>	CB500982
<b>Source</b>	<i>Pichia pastoris</i>
<b>Synonyms</b>	Anti-lipopolysaccharide factor, anti-LPS, LALF.

### Description

LALF has been isolated from the membranes of amoebocytes of *Limulus polyphemus*. LALF is a single-chain polypeptide with a molecular weight of 11,800. The principal structure of the molecule consists of 102 amino acids and is partially homologous with structures of molecules in the lactalbumin-lysozyme family.

LALF has a high affinity binding for LPS and bactericidal for gram negative bacteria. LALF binds the lipid A part of a variety of chemically diverse LPSs.

It can be used for endotoxin removal and detection. LALF reacts with specific antisera in ELISA and Western blots.

Recombinant LALF, entire coding region for limulus antilipopolysaccharide factor derived from *Pichia pastoris*. LALF is a 12,000 dalton protein. The LALF is purified by proprietary chromatographic techniques.

### Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

### Biological Activity

Antibacterial activity against *E. coli* less than

10ug/ml at 10e6 PFU/ml. Binds to and inactivates endotoxin (LPS).

### Purity

Greater than 95.0% as determined by:

(a) Analysis by RP-HPLC.

(b) Analysis by SDS-PAGE.

### Formulation

Lyophilized from a concentrated (1mg/ml) solution containing no additives.

### Reconstitution

It is recommended to reconstitute the lyophilized LALF in sterile 20mM acetic acid not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

### Stability

Lyophilized LALF although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution LALF should be stored at 4°C between 2-7 days and for future use below -18°C.

For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

**Please prevent freeze-thaw cycles.**