

## *Staphylococcus aureus* Lipoteichoic acid (LTA)

**Catalog #:** 1600-001

**Lot #:** 1306008

**Description:** Highly Purified lipoteichoic acid (LTA) from *Staphylococcus aureus*.

**Supplied:** 5.0 mg supplied as a lyophilized powder.

**Storage:** 4°C

**Relevance:** LTA can be found at the cell surface of most gram-positive bacteria. Few pathogen recognition receptors have been reported for LTA and a more precise biological role of LTA is still under investigation. When expressed on the cell exterior, LTA is thought to act as an adhesion as well as mediating inflammatory responses in the host.

### Product Specifications:

Test	Specification
Appearance	Lyophilized powder, white to faint yellow
Protein Content (% Protein)	0.24%
Phosphate Content	6 µmole/mg LTA
LPS	0.016EU/mg
Nucleic acid Content (%)	< 2%

### ELISA Testing:

Highly purified LTA was coated onto microtiter plates at either 1µg/well or 0.2µg/well. Positive control mouse sera or negative control mouse sera were serially diluted 2-fold starting at a 1:200 dilution and incubated on the coated plates. Washed plates were detected with anti-mouse HRP conjugate and TMB substrate. After stopping the reaction with 0.5M HCL, OD<sub>450</sub> is reported.

Dilution	Positive Control sera		Negative Control sera	
	LTA @ 1 µg	LTA @ 0.2 µg	LTA @ 1 µg	LTA @ 0.2 µg
200	3.897	3.810	0.076	0.188
400	3.671	3.543	0.083	0.101
800	3.290	2.859	0.073	0.093
1600	2.447	1.773	0.067	0.148
3200	1.322	0.938	0.070	0.104
6400	0.778	0.463	0.061	0.115
12800	0.377	0.244	0.062	0.120
25600	0.190	0.126	0.058	0.111
51200	0.106	0.088	0.058	0.123
102400	0.070	0.075	0.062	0.138
Background	0.047	0.059	0.117	0.066

**TLR2 Stimulation: Not tested**

### References

1. The Physiology and Biochemistry of Prokaryotes, 2nd ed., White, D., Oxford University Press (New York, NY: 999), p.16.
2. Schroder, *et al.*, J. Biol. Chem. 2003, 278:15587-15594.

**Intended for research use only, not for human, therapeutic, or diagnostic applications.**

*The buyer cannot sell or otherwise transfer this product for Commercial Purposes without written approval of Integrated BioTherapeutics, Inc.*

**Copyright 2014. Integrated BioTherapeutics, Inc. All rights reserved**