

Datasheet for ABIN2536149
Lipoteichoic Acid ELISA Kit



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1 Publication

Overview

Quantity:	96 tests
Target:	Lipoteichoic Acid (LTA)
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	7.8 pg/mL - 500 pg/mL
Minimum Detection Limit:	7.8 pg/mL
Application:	ELISA

Product Details

Purpose:	Human Lipoteichoic Acids ELISA Kit is an ELISA Kit against Lipoteichoic Acids.
Sample Type:	Plasma, Serum
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Sensitivity:	< 4.69 pg/mL
Characteristics:	Human Lipoteichoic Acids ELISA Kit is an ELISA kit against Human Lipoteichoic Acids.

Target Details

Target:	Lipoteichoic Acid (LTA)
Alternative Name:	Lipoteichoic Acids (LTA Products)
Target Type:	Chemical

Target Details

Background: Lipoteichoic acid (LTA) is a major constituent of the cell wall of gram-positive bacteria. These organisms have an inner (or cytoplasmic) membrane and, external to it, a thick (up to 80 nanometer) peptidoglycan layer. The structure of LTA varies between the different species of Gram positive bacteria and may contain long chains of ribitol or glycerol phosphate. LTA is anchored to the cell membrane via a diacylglycerol. It acts as regulator of autolytic wall enzymes (muramidases). It has antigenic properties being able to stimulate specific immune response and is released from the bacterial cells mainly after bacteriolysis induced by lysozyme, cationic peptides from leucocytes, or beta-lactam antibiotics.

Application Details

Application Notes: **Stability:** The stability of the kit is determined by the rate of activity loss. The loss rate is less than 5 % within the expiration date under appropriate storage conditions. To minimize performance fluctuations, operation procedures and lab conditions should be strictly controlled. It is also strongly suggested that the whole assay is performed by the same user throughout. **Recommended dilutions:** Optimal dilutions/concentrations should be determined by the end user.
Standard Form: Lyophilized

Comment: This kit is based on sandwich enzyme-linked immuno-sorbent assay technology. Lipoteichoic acid antibody is pre-coated onto 96- well plates. Biotin conjugated antibody is used as a detection antibody. The standards, test samples and biotin detection antibody are added to the wells and washed with wash buffer. HRP Streptavidin is added and unbound conjugates are washed away with wash buffer. TMB substrate is used to visualize HRP enzymatic reaction. TMB is catalyzed by HRP to produce a blue colour product that changes into yellow after adding stop solution. The intensity of the color yellow is proportional to the Lipoteichoic acid amount bound on the plate. The O.D. absorbance is measured spectrophotometrically at 450nm in a microplate reader, and then the concentration of Lipoteichoic acid can be calculated.

Plate: Pre-coated

Restrictions: For Research Use only

Handling

Storage: 4 °C/-20 °C

Storage Comment: Upon receipt, store the kit according to the storage instruction in the kit's manual.

Handling

Expiry Date: 6 months

Publications

Product cited in: Piñero, Juanola, Caparrós, Zapater, Giménez, González-Navajas, Such, Francés: "Toll-like receptor polymorphisms compromise the inflammatory response against bacterial antigen translocation in cirrhosis." in: **Scientific reports**, Vol. 7, pp. 46425, (2017) ([PubMed](#)).