## Human Lipoarabinomannan (LAM) ELISA Kit

Catalog No: #EK12145



Package Size: #EK12145-1 48T #EK12145-2 96T

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| Description        |  |
|--------------------|--|
| Product Name       | Human Lipoarabinomannan (LAM) ELISA Kit  |
| Brief Description  | ELISA Kit  |
| Applications       | ELISA  |
| Species Reactivity | Human (Homo sapiens)   |
| Storage            | The stability of ELISA kit is determined by the loss rate of activity. The loss rate of this kit is less than 5% |
|                    | within the expiration date under appropriate storage condition.  |
|                    | The loss rate was determined by accelerated thermal degradation test. Keep the kit at 37C for 4 and 7 days,      |
|                    | and compare O.D.values of the kit kept at 37C with that of at recommended temperature. (referring from China     |
|                    | Biological Products Standard, which was calculated by the Arrhenius equation. For ELISA kit, 4 days storage      |
|                    | at 37C can be considered as 6 months at 2 - 8C, which means 7 days at 37C equaling 12 months at 2 - 8C).         |

## **Application Details**

| Detect Range:Request Information                   |  |
|--|--|
| Sensitivity:Request Information                    |  |
| Sample Type:Serum, Plasma, Other biological fluids |  |
| Sample Volume: 1-200 μL                            |  |
| Assay Time:1-4.5h                                  |  |
| Detection wavelength:450 nm                        |  |

## **Product Description**

Detection Method:SandwichTest principle:This assay employs a two-site sandwich ELISA to quantitate LAM in samples. An antibody specific for LAM has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyLAM present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for LAM is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of LAM bound in the initial step. The color development is stopped and the intensity of the color is measured. Product Overview: Lipoarabinomannan is a lipoglycan and major virulence factor in the bacteria genus Mycobacterium. In addition to serving as a major cell wall component, it is thought to serve as a modulin with immunoregulatory and anti-inflammatory effects. This allows the bacterium maintain survival in the human reservoir by undermining host resistance and acquired immune responses. These mechanisms include the inhibition of T-cell proliferation and of macrophage microbicidal activity via diminished IFN- $\gamma$  response.? Additional functions of lipoarabinommanan are thought to include the neutralization of cytotoxic oxygen free radicals produced by macrophages, inhibition of protein kinase C, and induction of early response genes. Lipoarabinomannan is synthesized via addition of mannose residues to phosphoinositol by a series of mannosyltransferases to produce PIMs and lipomannan(LM).

Note: This product is for in vitro research use only