Datasheet for ABIN7012787

Lipopolysaccharides (LPS) ELISA Kit

Go to Product page

1 Image

Overview

Quantity:	96 tests
Target:	Lipopolysaccharides (LPS)
Reactivity:	Various Species
Method Type:	Competition ELISA
Detection Range:	12.35 ng/mL - 1000 ng/mL
Minimum Detection Limit:	12.35 ng/mL
Application:	ELISA

Product Details

Purpose:	The kit is a small sample competitive enzyme immunoassay for in vitro quantitative measurement in various sample types.
Sample Type:	Cell Culture Supernatant, Cell Lysate, Plasma, Serum, Tissue Homogenate
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Specificity:	This assay has high sensitivity and excellent specificity for detection of Lipopolysaccharide.
Sensitivity:	4.53 ng/mL
Grade:	Small Sample
Components:	• Pre-coated, ready to use 96-well strip plate, flat buttom • Plate sealer for 96 wells • Reference Standard

Product Details

- Standard Diluent
- Detection Reagent A
- Detection Reagent B
- Assay Diluent A
- Assay Diluent B
- Reagent Diluent (if Detection Reagent is lyophilized)
- TMB Substrate
- Stop Solution
- Wash Buffer (30 x concentrate)
- Instruction manual

Target Details

Target:	Lipopolysaccharides (LPS)
Alternative Name:	Lipopolysaccharide (Lipopolysaccharides (LPS) Products)
Target Type:	Chemical
Background:	LOS, Lipoglycans, Lipooligosaccharide, Lipo-Oligosaccharide, Endotoxin

Application Details

Sample Volume:	25 µL
Assay Time:	3 h
Plate:	Pre-coated
Protocol:	1. Prepare all reagents, samples and standards, 2. Add 25µL standard or sample to each well. Incubate 1 hours at 37 °C, 3. Aspirate and add 25µL prepared Detection Reagent A. Incubate 1 hour at 37 °C, 4. Aspirate and wash 3 times, 5. Add 25µL prepared Detection Reagent B. Incubate 30 minutes at 37 °C, 6. Aspirate and wash 5 times, 7. Add 25µL Substrate Solution. Incubate 10-20 minutes at 37 °C, 8. Add 20µL Stop Solution. Read at 450nm immediately.
Reagent Preparation:	1. Bring all kit components and samples to room temperature (18-25 °C) before use. If the kit is not used up all at once, remove only the strips and reagents for the current experiment and leave the remaining strips and reagents in the desired condition. 2. **Standard** - Reconstitute the Standard with 0.5mL of Standard Diluent, kept for 10 minutes at room temperature, shake gently (not to foam). The concentration of the standard in the stock solution is 1,000ng/mL. Please prepare 5 tubes containing 0.6mL Standard Diluent and produce a triple dilution. Mix each tube thoroughly before the next transfer. Set up 5 points of

diluted standard such as 1,000ng/mL, 333.33ng/mL, 111.11ng/mL, 37.04ng/mL, 12.35ng/mL, and the last tube with Standard Diluent is the blank as 0ng/mL

3. **Detection Reagent A** and **Detection Reagent B** - Spin or centrifuge the stock of Detection Reagent A and B briefly before use. Dilute to working concentration (1:100) with Assay Diluent A or B, respectively.
4. **Wash Solution** - Dilute 10 mL of Wash Solution Concentrate (30x) with 290 mL of deionized or distilled water to make 300 mL of Wash Solution (1x).
5. **TMB Substrate** - Aspirate the required amount of solution with sterile tip and do not return the residual solution back into the vial.

Note:

1. Serial dilution directly in the wells is not recommended.
2. Prepare standard within 15 minutes before assay. Do not dissolve the reagents directly at 37 °C.
3. Detection Reagent A and B are sticky solutions, so pipette them slowly to reduce volume errors.
4. Reconstitute Standard or working solutions of Detection Reagent A and B carefully according to instructions, avoiding foaming and mixing gently until crystals are completely dissolved. To minimize inaccuracy caused by pipetting, use small volumes and ensure pipettes are calibrated. It is recommended to aspirate more than 10 µL for one-time pipetting.
5. The reconstituted Standard, Detection Reagent A and B can only be used once.
6. When crystals have formed in the Wash Solution concentrate (30x), warm it to room temperature and mix gently until the crystals are completely dissolved.
7. Contaminated water or preparation containers affect the detection result.

Sample Preparation:

- It is recommended to use fresh samples without long storage, otherwise protein degradation and denaturationmay occur in these samples, leading to false results. Samples should therefore be stored for a short periodat 2 - 8 °C or aliquoted at -20 °C (≤1 month) or -80 °C (≤ 3 months). Repeated freeze-thawcycles should be avoided. Prior to assay, the frozen samples should be slowly thawed and centrifuged toremove precipitates.
- If the sample type is not specified in the instructions, a preliminary test is necessary to determinecompatibility with the kit.
- If a lysis buffer is used to prepare tissue homogenates or cell culture supernatant, there is a possibilityof causing a deviation due to the introduced chemical substance.The recommended dilution factor is for reference only.
- Please estimate the concentration of the samples before performing the test. If the values are not in therange of the standard curve, the optimal sample dilution for the particular experiment has to be determined.Samples should then be diluted with PBS (pH =7.0-7.2).

Assay Precision:

Intra-assay Precision (Precision within an assay): 3 samples with low, middle and high level of target were tested 20 times on one plate, respectively.

Inter-assay Precision (Precision between assays): 3 samples with low, middle and high level of target were tested on 3 different plates, 8 replicates in each plate.

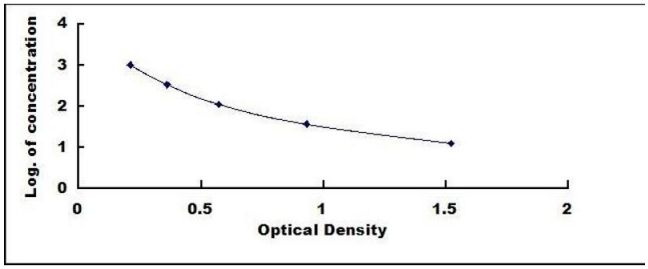
Application Details

	CV(%) = SD/meanX100 Intra-Assay: CV < 10% Inter-Assay: CV < 12%
Restrictions:	For Research Use only

Handling

Storage:	4 °C/-20 ° C
Storage Comment:	1. For unopened kit: All reagents should be stored according to the labels on the vials. The Standard, Detection Reagent A, Detection Reagent B, and 96-well Strip Plate should be stored at -20 °C upon receipt, while the other reagents should be stored at 4 °C. 2. For opened kits: the remaining reagents must be stored according to the above storage conditions. In addition, please return the unused wells to the foil pouch containing the desiccant and seal the foil pouch with the zipper.
Expiry Date:	6 months

Images



ELISA

Image 1. Typical standard curve

