## Rat Toll-like receptor 7 (TLR-7) ELISA Kit

Catalog No: #EK6496

Package Size: #EK6496-1 48T #EK6496-2 96T



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| Description        |  |
|--------------------|--|
| Product Name       | Rat Toll-like receptor 7 (TLR-7) ELISA Kit   |
| Brief Description  | ELISA Kit  |
| Applications       | ELISA  |
| Species Reactivity | Rat (Rattus norvegicus)  |
| 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:0.156-10 ng/mL                        |
|--|
| Sensitivity:0.054 ng/mL                            |
| 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 TLR-7 in samples. An antibody specific for TLR-7 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyTLR-7 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for TLR-7 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 TLR-7 bound in the initial step. The color development is stopped and the intensity of the color is measured. Product Overview: Toll-like receptor 7 is a member of the Toll-like receptor family which plays a fundamental role in pathogen recognition and activation of innate immunity. TLRs are highly conserved from Drosophila to humans and share structural and functional similarities. They recognize pathogen-associated molecular patterns that are expressed on infectious agents, and mediate the production of cytokines necessary for the development of effective immunity. The various TLRs exhibit different patterns of expression. This gene is predominantly expressed in lung, placenta, and spleen, and lies in close proximity to another family member, TLR8, on human chromosome X. Imiquimod acts upon TLR 7. TLR7 recognises single stranded RNA in endosomes, which is a common feature of viral genomes which are internalised by macrophages.

Note: This product is for in vitro research use only