

## Rat Leukotriene C4 (LT-C4) ELISA Kit

Catalog No: #EK10009



Package Size: #EK10009-1 48T #EK10009-2 96T

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## Description

|                    |  |
|--------------------|--|
| Product Name       | Rat Leukotriene C4 (LT-C4) ELISA Kit   |
| Brief Description  | ELISA Kit  |
| Applications       | ELISA  |
| Species Reactivity | Rat ( <i>Rattus norvegicus</i> )   |
| Storage            | <p>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.</p> <p>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).</p> |

## Application Details

Detect Range:370.4-30000 pg/mL

Sensitivity:142.5 pg/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:**Sandwich Test principle:This assay employs a two-site sandwich ELISA to quantitate LT-C4 in samples. An antibody specific for LT-C4 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyLT-C4 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for LT-C4 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 LT-C4 bound in the initial step. The color development is stopped and the intensity of the color is measured.

**Product Overview:**Leukotriene C4 is a leukotriene. Leukotrienes (LTs) are synthesized from membrane derived arachidonic acid. Downstream of 5-lipoxygenase in the arachidonic acid cascade, leukotriene C4 synthase (LTC4S)catalyses the conjugation of leukotriene A4 (LTA4)with reduced glutathione to form LTC4, then LTC4 convert to active metabolites LTD4 and LTE4. LTC4,LTD4 and LTE4, which are called cysteinyl leukotrienes (CysLTs), are potent proinflammatory mediators of asthma. There is a polymorphism of adenine (A) to cytosine (C)transversion at -444 locus in the promoter region of the LTC4S gene, A-444C.1 This allelic variant results in an extra recognition site for the Ap-2 transcription factor and is associated with an increased LTC4S transcription rate. 2 Some studies in other countries suggest that LTC4S A-444C polymorphism is associated with asthmatic severity and clinical response to leukotriene receptor antagonist.3-5

Note: This product is for in vitro research use only