

**Description**

Leukotriene B<sub>4</sub> (LTB<sub>4</sub>) is derived from LTA<sub>4</sub> which is biosynthesized from arachidonic acid. LTB<sub>4</sub> is produced in phagocytic cells such as leukocytes and macrophages. It is the most potent chemotactic substance ever described for leukocytes. It also stimulates vascular permeability and may play a significant role in mediating inflammatory responses. The availability of an assay for LTB<sub>4</sub> facilitates the evaluation of the physiological and pathological roles of this lipid mediator.

**Kit Contents**

- LTB<sub>4</sub> Antibody-Coated Microplate (96 well)
- LTB<sub>4</sub> Standard
- LTB<sub>4</sub> Enzyme Conjugate, lyophilized (HRP)
- K-Blue Substrate (TMB)
- EIA Buffer
- Wash Buffer (10x)
- Extraction Buffer (5x)
- Instruction Booklet

**Cross-reactivity**

Leukotriene B <sub>4</sub> .....	100.00%
6-trans-LTB <sub>4</sub> .....	25.00%
Leukotriene B <sub>5</sub> .....	14.58%
5(S), 12(S)-DiHETE .....	6.00%
Leukotriene D <sub>4</sub> .....	0.96%
20-hydroxy-LTB <sub>4</sub> .....	0.50%
Leukotriene E <sub>4</sub> .....	0.30%
Leukotriene C <sub>4</sub> .....	0.20%
5(S)HETE .....	0.15%
Arachidonic Acid .....	<0.10%
20-carboxy-LTB <sub>4</sub> .....	<0.10%
12(S) HETE .....	<0.10%
12(R) HETE .....	<0.10%
15-HETE .....	<0.01%
Prostaglandin A <sub>2</sub> .....	<0.01%
Prostaglandin B <sub>2</sub> .....	<0.01%
Prostaglandin D <sub>2</sub> .....	<0.01%
Prostaglandin E <sub>2</sub> .....	<0.01%
Prostaglandin F <sub>2α</sub> .....	<0.01%
6-keto-Prostaglandin F <sub>1α</sub> .....	<0.01%
Thromboxane B <sub>2</sub> .....	<0.01%

**Specifications**

Sensitivity:	
80% B/B <sub>0</sub> .....	0.1 ng/mL
50% B/B <sub>0</sub> .....	0.62 ng/mL
Assay Range .....	0.04 – 4.0 ng/mL
Inter-Assay CV .....	≤ 10%
Intra-Assay CV .....	≤ 10%
Size .....	96 well microplate
Assay Sample Size .....	50 µL
Total Assay Incubation Time .....	1.5 hours
Wavelength .....	650 nm, 450 nm with acid stop
Storage Conditions .....	-20°C for lyophilized conjugate, 4°C for all other kit components
Antibody .....	Polyclonal, Rabbit

**Research use only**

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