

# Human Trimethyllysine dioxygenase, mitochondrial (TMLHE) ELISA Kit



Catalog No: #EK6334

Orders: [order@signalwayantibody.com](mailto:order@signalwayantibody.com)

Package Size: #EK6334-1 48T #EK6334-2 96T

Support: [tech@signalwayantibody.com](mailto:tech@signalwayantibody.com)

## Description

Product Name	Human Trimethyllysine dioxygenase, mitochondrial (TMLHE) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Human (Homo sapiens)
Other Names	BBOX2; FLJ10727; TMLH; XAP130; butyrobetaine (gamma); 2-oxoglutarate dioxygenase (gamma-butyrobetaine hydroxylase) 2[epsilon-trimethyllysine 2-oxoglutarate]epsilon-trimethyllysine hydroxylase
Accession No.	Q9NVH6
Uniprot	Q9NVH6
GeneID	55217;
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: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 TMLHE in samples. An antibody specific for TMLHE has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyTMLHE present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for TMLHE 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 TMLHE bound in the initial step. The color development is stopped and the intensity of the color is measured.**Product Overview:**Epsilon-N-trimethyllysine hydroxylase (EC 1.14.11.8) catalyzes the conversion of epsilon-N-trimethyllysine to beta-hydroxy-N-epsilon-trimethyllysine in the first step of L-carnitine biosynthesis.

The deduced 421-amino acid human TMLHE and 405-amino acid rat Tmlhe proteins have calculated molecular masses of 49.5 kD and 47.5 kD, respectively, and share 92% amino acid identity. Subcellular fractionation localized rat Tmlhe to mitochondria. Rat Tmlhe was synthesized as a 47.5-kD precursor that is processed to an approximately 43-kD protein, most likely through cleavage of a mitochondrial targeting signal. Gel filtration

analysis showed rat Tmlhe as an 87-kD band, suggesting that Tmlhe forms a homodimer.

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Note: This product is for in vitro research use only