

# Mouse Mitochondrial import inner membrane translocase subunit TIM44 (TIMM44) ELISA Kit

Catalog No: #EK6561

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Package Size: #EK6561-1 48T #EK6561-2 96T

## Description

Product Name	Mouse Mitochondrial import inner membrane translocase subunit TIM44 (TIMM44) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Mouse ( <i>Mus musculus</i> )
Other Names	DKFZp686H05241; TIM44; mitochondrial inner membrane translocase translocase of inner mitochondrial membrane 44
Accession No.	O35857
Uniprot	O35857
GeneID	21856;
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:0.312-20 ng/mL

Sensitivity:0.135 ng/mL

Sample Type:Serum, Plasma, Other biological fluids

Sample Volume: 1-200  $\mu$ L

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 TIMM44 in samples. An antibody specific for TIMM44 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyTIMM44 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for TIMM44 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 TIMM44 bound in the initial step. The color development is stopped and the intensity of the color is measured.**Product Overview:**TIM44, a peripheral inner membrane protein, tethers mitochondrial HSP70 to the import channel. A model peptide substrate rapidly released mitochondrial HSP70 from TIM44, even in the absence of ATP hydrolysis. In vivo, the analogous interaction of translocating polypeptide would release mitochondrial HSP70 from the channel.

TIMM44 is hydrophilic and contains no hydrophobic membrane-spanning segments. The N terminus has a coiled-coil motif and a matrix-targeting segment with 6 positively and no negatively charged residues. Western blot analysis showed that TIMM44 is present in membranes as well as matrix and is most likely a 45-kD peripheral membrane protein loosely associated with the inner membrane of mitochondria.

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Note: This product is for in vitro research use only