

# Rat TRNA pseudouridine synthase A, mitochondrial (PUS1) ELISA Kit

Catalog No: #EK11393

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Package Size: #EK11393-1 48T #EK11393-2 96T

## Description

Product Name	Rat TRNA pseudouridine synthase A, mitochondrial (PUS1) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Rat ( <i>Rattus norvegicus</i> )
Other Names	MGC11268; pseudouridine synthase 1 trNA uridine isomerase I
Accession No.	Q4KM92
Uniprot	Q4KM92
GeneID	304567;
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:31.25-2000 pg/mL

Sensitivity:13.6 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:**SandwichTest principle:This assay employs a two-site sandwich ELISA to quantitate PUS1 in samples. An antibody specific for PUS1 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyPUS1 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for PUS1 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 PUS1 bound in the initial step. The color development is stopped and the intensity of the color is measured.**Product Overview:**PUS1 converts uridine into pseudouridine after the nucleotide has been incorporated into RNA. Pseudouridine may have a functional role in tRNAs and may assist in the peptidyl transfer reaction of rRNAs

PUS1-1 encodes a protein with an N-terminal mitochondrial leader peptide. Western blot analysis detected full-length PUS1-1 at an apparent molecular mass of 47 kD, and the mature protein, lacking the mitochondrial localization signal, was about 37 kD. The PUS1-2 and PUS1-3 transcripts differ in the 5-prime untranslated region but encode the same protein that begins with an internal methionine (met29) relative to PUS1-1. Immunofluorescence localized PUS1-1 to mitochondria and PUS1-2 and PUS1-3 to nuclei.

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Note: This product is for in vitro research use only