Human Thioredoxin-related transmembrane protein 4 (TMX4) ELISA Kit

Catalog No: #EK6282

Package Size: #EK6282-1 48T #EK6282-2 96T

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

Description

Product Name	Human Thioredoxin-related transmembrane protein 4 (TMX4) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Human (Homo sapiens)
Other Names	DJ971N18.2; KIAA1162; PDIA14; TXNDC13; protein disulfide isomerase family A; member 14|thioredoxin domain containing 13
Accession No.	Q9H1E5
Uniprot	Q9H1E5
GeneID	56255;
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: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 TMX4 in samples. An antibody specific for TMX4 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyTMX4 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for TMX4 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 TMX4 bound in the initial step. The color development is stopped and the intensity of the color is measured.Product Overview:TMX4, a type I transmembrane protein, was localized to the ER and possessed a Trx-like domain that faced the ER lumen. A maleimide alkylation assay showed that a catalytic CXXC motif in the TMX4 Trx-like domain underwent changes in its redox state depending on cellular redox conditions, and, in the normal state, most of the endogenous TMX4 existed in the oxidized form. The redox potential of this domain indicated that TMX4 could work as a reductase in the environment of the ER. TMX4 had no effect on the acceleration of ER-associated degradation. Because TMX4 interacted with calnexin and ERp57 by co-immunoprecipitation assay, the role of TMX4 may be to enable protein folding in cooperation with these proteins consisting of folding complex in the ER.

Note: This product is for in vitro research use only