Bovine Mitochondrial-processing peptidase subunit beta (PMPCB) ELISA Kit

Catalog No: #EK11457

Package Size: #EK11457-1 48T #EK11457-2 96T

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

Description

Product Name	Bovine Mitochondrial-processing peptidase subunit beta (PMPCB) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Bovine (Bos taurus; Cattle)
Other Names	Beta-MPP; MPP11; MPPB; MPPP52; mitochondrial processing peptidase beta subunit
Accession No.	Q3SZ71
Uniprot	Q3SZ71
GeneID	534546;
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 PMPCB in samples. An antibody specific for PMPCB has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyPMPCB present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for PMPCB 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 PMPCB bound in the initial step. The color development is stopped and the intensity of the color is measured.Product Overview:PMPCb is a member of the peptidase M16 family and encodes a protein with a zinc-binding motif. This protein is located in the mitochondrial matrix and catalyzes the cleavage of the leader peptides of precursor proteins newly imported into the mitochondria, though it only functions as part of a heterodimeric complex.In in vitro assays, MPPB bound frataxin, which was cleaved by the reconstituted MPP heterodimer. MPP cleavage of frataxin resulted in an intermediate form, comprising amino acids 41 to 210, which was processed further to the mature form. In vitro and in vivo experiments suggested that 2 C-terminal missense mutations found in FRDA patients, I151F and G130V, modulated interaction with MPP-beta, resulting in a slower maturation process at the normal cleavage site.

Note: This product is for in vitro research use only