

Bovine Peptidyl-prolyl cis-trans isomerase D (PPID) ELISA Kit



Catalog No: #EK8370

Orders: order@signalwayantibody.com

Package Size: #EK8370-1 48T #EK8370-2 96T

Support: tech@signalwayantibody.com

Description

Product Name	Bovine Peptidyl-prolyl cis-trans isomerase D (PPID) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Bovine (Bos taurus; Cattle)
Other Names	CYP-40; CYPD; MGC33096; 40 kDa peptidyl-prolyl cis-trans isomerase D PPIase cyclophilin 40 cyclophilin D cyclophilin-related protein rotamase
Accession No.	P26882
Uniprot	P26882
GeneID	281420;
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:0.156-10 ng/mL

Sensitivity:0.054 ng/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:Sandwich Test principle: This assay employs a two-site sandwich ELISA to quantitate PPID in samples. An antibody specific for PPID has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and any PPID present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for PPID 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 PPID bound in the initial step. The color development is stopped and the intensity of the color is measured.

Product Overview:Cyclophilin D, which is located in the matrix of mitochondria, is a component of the mitochondrial permeability transition pore. The pore opening raises the permeability of the mitochondrial inner membrane, allows influx of cytosolic molecules into the mitochondrial matrix, increases the matrix volume, and disrupts the mitochondrial outer membrane. As a result, the mitochondria fall into a functional disorder, so the opening of the pore plays an important role in cell death. Cyclophilin D is thought to regulate the opening of the pore because cyclosporin, which binds to CyP-D, inhibits the pore opening.

Cyclophilin-40 (CyP40, also CYPD) was identified by Kieffer et al. (1992) as a 40-kD cyclophilin-like protein with PPIase activity. In the bovine uterus, CyP40 is a component of the estrogen receptor complex.

Note: This product is for in vitro research use only