

Rat Cyclooxygenase-1 (COX-1) ELISA Kit

Catalog No: #EK8011



Package Size: #EK8011-1 48T #EK8011-2 96T

Orders: order@signalwayantibody.com

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Description

Product Name	Rat Cyclooxygenase-1 (COX-1) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Rat (<i>Rattus norvegicus</i>)
Other Names	RP11-542K23.6; COX1; COX3; PCOX1; PGG/HS; PGHS-1; PGHS1; PHS1; PTGHS; prostaglandin G/H synthase and cyclooxygenase prostaglandin-endoperoxide synthase 1
Accession No.	O97554
Uniprot	O97554
GenID	100009407;
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:0.625-40 ng/mL

Sensitivity:0.245 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:SandwichTest principle:This assay employs a two-site sandwich ELISA to quantitate PTGS1 in samples. An antibody specific for PTGS1 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyPTGS1 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for PTGS1 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 PTGS1 bound in the initial step. The color development is stopped and the intensity of the color is measured.**Product Overview:**There are two isozymes of PTGS: a constitutive PTGS1 and an inducible PTGS2, which differ in their regulation of expression and tissue distribution. PTGS1, which regulates angiogenesis in endothelial cells, and is inhibited by nonsteroidal anti-inflammatory drugs such as aspirin. Recent research has shown that the inhibition of COX-1 is the main reason why aspirin is effective at reducing cardiac events (as opposed to aspirin's anti-platelet aggregation effects). PTGS1 is thought to be involved in cell-cell signaling and maintaining tissue homeostasis. Alternative splicing of this gene generates two transcript variants called COX-1 and COX-3. The expression of these two transcripts is differentially regulated by relevant cytokines and growth factors.

Note: This product is for in vitro research use only