

Rat Prostacyclin receptor (PTGIR) ELISA Kit

Catalog No: #EK8029



Package Size: #EK8029-1 48T #EK8029-2 96T

Orders: order@signalwayantibody.com

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Description

Product Name	Rat Prostacyclin receptor (PTGIR) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Rat (<i>Rattus norvegicus</i>)
Other Names	IP; MGC102830; PRIPR; PGI receptor prostacyclin receptor prostanoid IP receptor
Accession No.	P43253
Uniprot	P43253
GeneID	292661;
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: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 PTGIR in samples. An antibody specific for PTGIR has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyPTGIR present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for PTGIR 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 PTGIR bound in the initial step. The color development is stopped and the intensity of the color is measured.**Product Overview:**Prostacyclin receptor is a member of the G-protein coupled receptor family. Prostacyclin, the major product of cyclooxygenase in macrovascular endothelium, elicits a potent vasodilation and inhibition of platelet aggregation through binding to this receptor.

When binding a prostacyclin-molecule, the receptor changes conformation and activates Gs, with its activation of cAMP and increase in protein kinase A (PKA) activity.In vasodilation, the PKA activity causes phosphorylation of MLCK, decreasing its activity, resulting in dephosphorylation of MLC of myosin. The smooth muscle relaxation leads to vasodilation.

Note: This product is for in vitro research use only