Human CGMP-dependent protein kinase 1 (PRKG1) ELISA Kit

Catalog No: #EK11418

Package Size: #EK11418-1 48T #EK11418-2 96T

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

Description

Product Name	Human CGMP-dependent protein kinase 1 (PRKG1) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Human (Homo sapiens)
Other Names	RP11-346D6.1; CGKI; DKFZp686K042; FLJ36117; MGC71944; PGK; PKG; PRKG1B; PRKGR1B; cGKI-BETA; cGKI-alpha; protein kinase; cGMP-dependent; regulatory; type I; beta
Accession No.	Q13976;Gene Id:5592
Uniprot	Q13976
GeneID	5592;
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:Sandwich

Test principle:This assay employs a two-site sandwich ELISA to quantitate PRKG1 in samples. An antibody specific for PRKG1 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyPRKG1 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for PRKG1 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 PRKG1 bound in the initial step. The color development is stopped and the intensity of the color is measured.

Product Overview:Two main forms of cGK have been identified: a soluble form designated type I and an intrinsic membrane-bound form designated type II. Prkg1 knockout mice showed impaired platelet responses to VWF or low doses of thrombin and prolonged bleeding time. Human platelet aggregation induced by VWF or low-dose thrombin was inhibited by PRKG1 inhibitors but enhanced by cGMP. Furthermore, a cGMP-enhancing agent, sildenafil, promoted VWF- or thrombin-induced platelet aggregation. The cGMP-stimulated platelet responses were biphasic, consisting of an initial transient stimulatory response that promoted platelet aggregation and a subsequent inhibitory response that limited the size of thrombi.

Note: This product is for in vitro research use only