

# Mouse 1-phosphatidylinositol-4,5-bisphosphate phosphodiesterase gamma-2 (PLCG2) ELISA Kit

Catalog No: #EK8449

Orders: [order@signalwayantibody.com](mailto:order@signalwayantibody.com)Support: [tech@signalwayantibody.com](mailto:tech@signalwayantibody.com)

Package Size: #EK8449-1 48T #EK8449-2 96T

## Description

Product Name	Mouse 1-phosphatidylinositol-4,5-bisphosphate phosphodiesterase gamma-2 (PLCG2) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Mouse ( <i>Mus musculus</i> )
Other Names	Phospholipase C gamma 2 phospholipase C; gamma 2 phospholipase C; gamma 2 (phosphatidylinositol-specific)
Accession No.	Q8CIH5
Uniprot	Q8CIH5
GeneID	234779;
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:0.312-20 ng/mL

Sensitivity:0.125 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 PLCG2 in samples. An antibody specific for PLCG2 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyPLCG2 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for PLCG2 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 PLCG2 bound in the initial step. The color development is stopped and the intensity of the color is measured.**Product Overview:**Overexpressed wildtype rat Plcg1 or a lipase-inactive mutant Plcg1 each augmented ACE in rat PC12 cells, while a deletion mutant lacking the region containing the SH3 domain of Plcg1 was ineffective. RNA interference to deplete either Plcg1 or Plcg2 in PC12 and rat aortic smooth muscle A7r5 cells inhibited ACE. In chicken DT40 B lymphocytes expressing only Plcg2, overexpressed human muscarinic M5 receptors (M5R) activated ACE. Using DT40 PLC2 knockout cells, M5R stimulation of endoplasmic reticulum Ca(2+) store release was unaffected, but ACE was abolished. Normal ACE was restored by transient expression of rat Plcg2 or a lipase-inactive Plcg2 mutant. The results indicated a lipase-independent role of PLCG in the physiologic agonist-induced activation of Ca(2+) entry.

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Note: This product is for in vitro research use only