**GRK5** Antibody

Catalog No: #33756

Package Size: #33756-1 50ul #33756-2 100ul



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

Description	
Product Name	GRK5 Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific
	immunogen.
Applications	WB
Species Reactivity	Hu Ms Rt
Specificity	The antibody detects endogenous levels of total GRK5 protein.
Immunogen Type	Peptide
Immunogen Description	Synthesized peptide derived from internal of human GRK5.
Target Name	GRK5
Other Names	EC 2.7.11.16; G-protein-coupled receptor kinase 5; GPRK5; kinase GRK5;
Accession No.	Swiss-Prot: P34947NCBI Gene ID: 2869
Uniprot	P34947
GenelD	2869;
SDS-PAGE MW	68kd
Concentration	1.0mg/ml
Formulation	Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide
	and 50% glycerol.
Storage	Store at -20°C

## **Application Details**

Western blotting: 1:500~1:3000

## Images



Western blot analysis of extracts from HUVEC cells, HepG2 cells and HeLa cells, using GRK5 antibody #33756.

## Background

Serine/threonine kinase that phosphorylates preferentially the activated forms of a variety of G-protein-coupled receptors (GPCRs). Such receptor phosphorylation initiates beta-arrestin-mediated receptor desensitization, internalization, and signaling events leading to their down-regulation. Phosphorylates a variety of GPCRs, including adrenergic receptors, muscarinic acetylcholine receptors (more specifically Gi-coupled M2/M4 subtypes), dopamine receptors and opioid receptors. In addition to GPCRs, also phosphorylates various substrates: Hsc70-interacting protein/ST13, TP53/p53, HDAC5, and arrestin-1/ARRB1. Phosphorylation of ARRB1 by GRK5 inhibits G-protein independent MAPK1/MAPK3 signaling downstream of 5HT4-receptors. Phosphorylation of HDAC5, a repressor of myocyte enhancer factor 2 (MEF2) leading to nuclear export of HDAC5 and allowing MEF2-mediated transcription. Phosphorylation of TP53/p53, a crucial tumor suppressor, inhibits TP53/p53-mediated apoptosis. Phosphorylation of ST13 regulates internalization of the chemokine receptor. Phosphorylates rhodopsin (RHO) (in vitro) and a non G-protein-coupled receptor, LRP6 during Wnt signaling (in vitro).

Kunapuli P., Proc. Natl. Acad. Sci. U.S.A. 90:5588-5592(1993).

The MGC Project Team, Genome Res. 14:2121-2127(2004).

Note: This product is for in vitro research use only