

## ARG58830 anti-GRK5 antibody

Package: 50 µg  
Store at: -20°C

### Summary

Product Description	Rabbit Polyclonal antibody recognizes GRK5
Tested Reactivity	Hu, Ms, Rat
Predict Reactivity	Chk
Tested Application	IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	GRK5
Species	Human
Immunogen	Synthetic peptide corresponding to aa. 393-429 of Human GRK5 (KREEVDRRVLETEEVYSHKFSEEAKSICKMLLTDAK)
Conjugation	Un-conjugated
Alternate Names	G protein-coupled receptor kinase 5; EC 2.7.11.16; G protein-coupled receptor kinase GRK5; GPRK5

### Application Instructions

Application table	Application	Dilution
	IHC-P	0.5 - 1 µg/ml
	WB	0.1 - 0.5 µg/ml
Application Note	IHC-P: Antigen Retrieval: By heat mediation. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

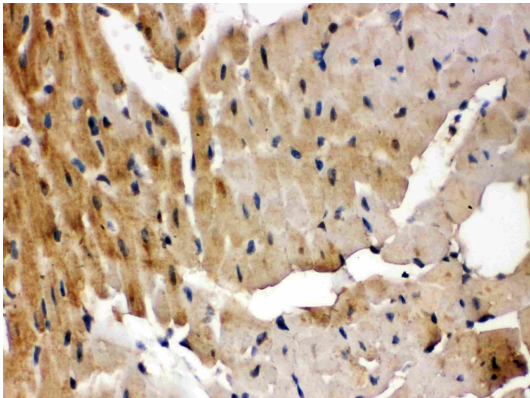
### Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.9% NaCl, 0.2% Na <sub>2</sub> HPO <sub>4</sub> , 0.05% Sodium azide and 5% BSA.
Preservative	0.05% Sodium azide
Stabilizer	5% BSA
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Bioinformation

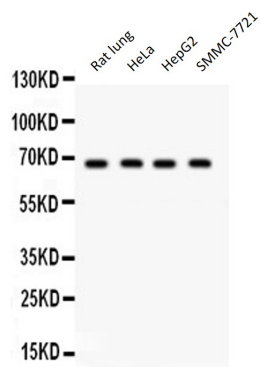
Gene Symbol	GRK5
Gene Full Name	G protein-coupled receptor kinase 5
Background	This gene encodes a member of the guanine nucleotide-binding protein (G protein)-coupled receptor kinase subfamily of the Ser/Thr protein kinase family. The protein phosphorylates the activated forms of G protein-coupled receptors thus initiating their deactivation. It has also been shown to play a role in regulating the motility of polymorphonuclear leukocytes (PMNs). [provided by RefSeq, Jul 2008]
Function	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). [UniProt]
Calculated Mw	68 kDa
PTM	Autophosphorylated. Autophosphorylation may play a critical role in the regulation of GRK5 kinase activity. [UniProt]
Cellular Localization	Cytoplasm. Nucleus. Cell membrane; Peripheral membrane protein. Predominantly localized at the plasma membrane; targeted to the cell surface through the interaction with phospholipids. Nucleus localization is regulated in a GPCR and Ca(2+)/calmodulin-dependent fashion. [UniProt]

Images



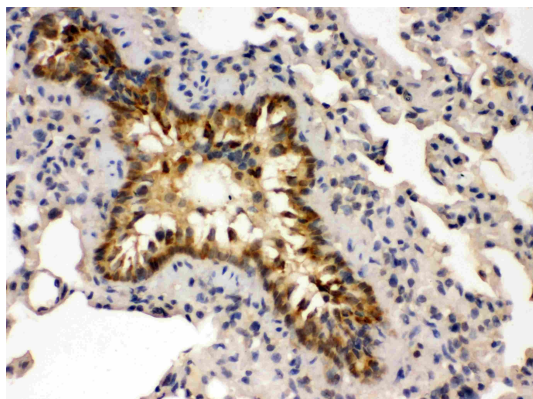
ARG58830 anti-GRK5 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Rat cardiac muscle stained with ARG58830 anti-GRK5 antibody.



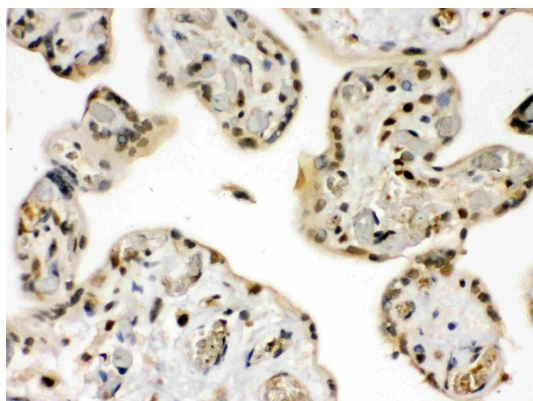
ARG58830 anti-GRK5 antibody WB image

Western blot: 50 µg of Rat lung, 40 µg of HeLa, 40 µg of HepG2 and 40 µg of SMMC-7721 cell lysates stained with ARG58830 anti-GRK5 antibody at 0.5 µg/ml dilution.



ARG58830 anti-GRK5 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Mouse lung stained with ARG58830 anti-GRK5 antibody.



ARG58830 anti-GRK5 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human placenta stained with ARG58830 anti-GRK5 antibody.