

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 (KREEVDRRVLETEEVYSHKFSEEAKSICKMLLTKDAK)
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

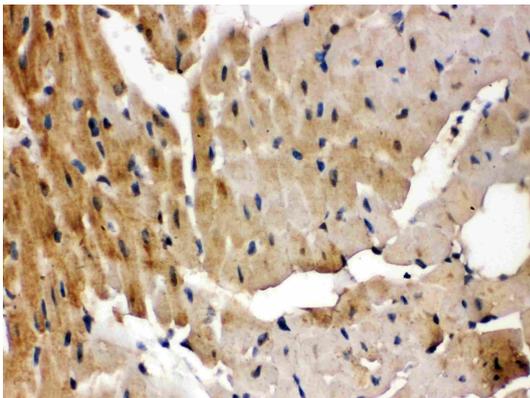
Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.9% NaCl, 0.2% Na ₂ HPO ₄ , 0.05% Sodium azide and 5% BSA.
Preservative	0.05% Sodium azide
Stabilizer	5% BSA
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term 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.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

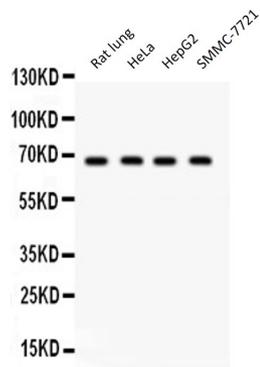
Gene Symbol	GRK5
Gene Full Name	G protein-coupled receptor kinase 5
Background	This gene encodes a member of the guanine nucleotide-binding protein (G protein)-coupled receptor kinase subfamily of the Ser/Thr protein kinase family. The protein phosphorylates the activated forms of G protein-coupled receptors 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



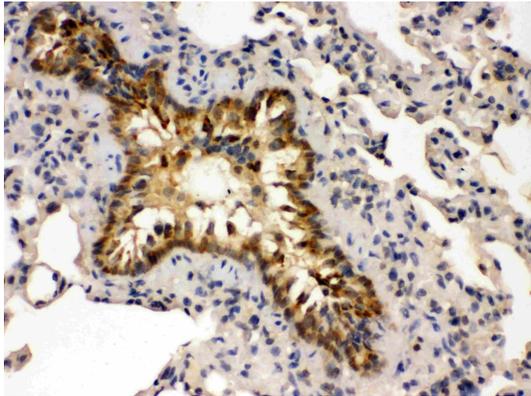
ARG58830 anti-GRK5 antibody IHC-P image

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



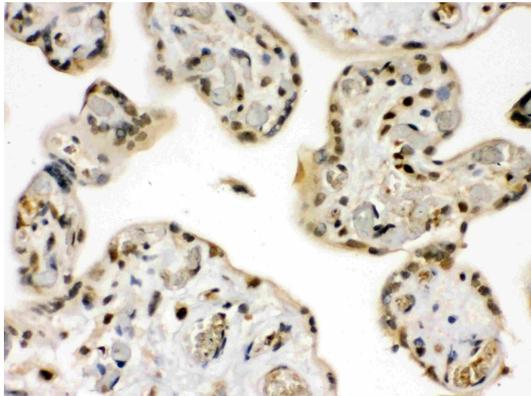
ARG58830 anti-GRK5 antibody WB image

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