

ARG58855 anti-GRK5 antibody

Package: 100 µl
Store at: -20°C

Summary

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|---------------------|--|
| Product Description | Rabbit Polyclonal antibody recognizes GRK5 |
| Tested Reactivity | Hu, Ms, Rat |
| Tested Application | ICC/IF, IHC-P, WB |
| Host | Rabbit |
| Clonality | Polyclonal |
| Isotype | IgG |
| Target Name | GRK5 |
| Species | Human |
| Immunogen | Recombinant fusion protein corresponding to aa. 371-590 of Human GRK5 (NP_005299.1). |
| 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 |
|-------------------|--|----------------|
| | ICC/IF | 1:50 - 1:200 |
| | IHC-P | 1:50 - 1:200 |
| | WB | 1:200 - 1:2000 |
| Application Note | * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist. | |
| Positive Control | U-251 | |
| Observed Size | 68 kDa | |

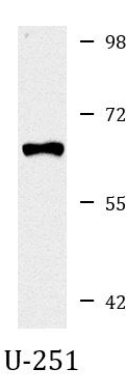
Properties

| | |
|---------------------|---|
| Form | Liquid |
| Purification | Affinity purified. |
| Buffer | PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol. |
| Preservative | 0.02% Sodium azide |
| Stabilizer | 50% Glycerol |
| 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. 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. [UniProt] |

Images



ARG58855 anti-GRK5 antibody WB image

Western blot: 25 µg of U-251 cell lysate stained with ARG58855 anti-GRK5 antibody at 1:1000 dilution.