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KD-Validated Anti-GRK2 Rabbit Polyclonal Antibody

Rabbit polyclonal antibody
Catalog # AGI2114

Specification

KD-Validated Anti-GRK2 Rabbit Polyclonal Antibody - Product Information

Application	**WB**
Primary Accession	P25098
Reactivity	**Rat, Human, Mouse**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted, 80 kDa, observed, 75 kDa KDa**
Gene Name	**GRK2**
Aliases	**GRK2; G Protein-Coupled Receptor Kinase 2; BARK1; ADRBK1; Beta-Adrenergic Receptor Kinase 1; EC 2.7.11.15; Beta-ARK-1; Adrenergic, Beta, Receptor Kinase 1; G-Protein Coupled Receptor Kinase 2; Adrenergic Beta Receptor Kinase 1; BETA-ARK1; EC 2.7.11 47; BARK**
Immunogen	**A synthesized peptide derived from human GRK2**

KD-Validated Anti-GRK2 Rabbit Polyclonal Antibody - Additional Information

Gene ID	**156**

Other Names
Beta-adrenergic receptor kinase 1, Beta-ARK-1, 2.7.11.15, G-protein coupled receptor kinase 2 {ECO:0000312|HGNC:HGNC:289}, GRK2 (HGNC:289), ADRBK1, BARK, BARK1

KD-Validated Anti-GRK2 Rabbit Polyclonal Antibody - Protein Information

Name GRK2 (HGNC:289)

Synonyms ADRBK1, BARK, BARK1

Function
Specifically phosphorylates the agonist-occupied form of the beta-adrenergic and closely related receptors, probably inducing a desensitization of them (PubMed:19715378). Key regulator of LPAR1 signaling (PubMed:19306925). Competes with RALA for binding to LPAR1 thus affecting the signaling properties of the receptor (PubMed:19306925). Desensitizes LPAR1 and LPAR2 in a phosphorylation-independent manner (PubMed:19306925). Positively regulates ciliary smoothened (SMO)-dependent

Hedgehog (Hh) signaling pathway by facilitating the trafficking of SMO into the cilium and the stimulation of SMO activity (By similarity). Inhibits relaxation of airway smooth muscle in response to blue light (PubMed:30284927).

Cellular Location
Cytoplasm {ECO:0000250|UniProtKB:P26817}. Cell membrane {ECO:0000250|UniProtKB:P21146}. Postsynapse {ECO:0000250|UniProtKB:P26817}. Presynapse {ECO:0000250|UniProtKB:P26817}

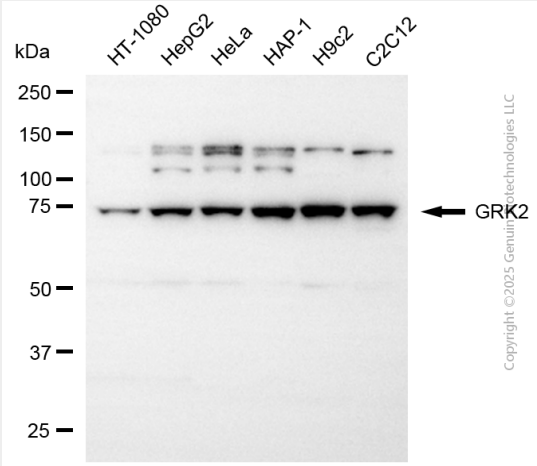
Tissue Location
Expressed in peripheral blood leukocytes.

KD-Validated Anti-GRK2 Rabbit Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-GRK2 Rabbit Polyclonal Antibody - Images



Western blotting analysis using anti-GRK2 antibody (Cat#AGI2114). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-GRK2 antibody (Cat#AGI2114, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.

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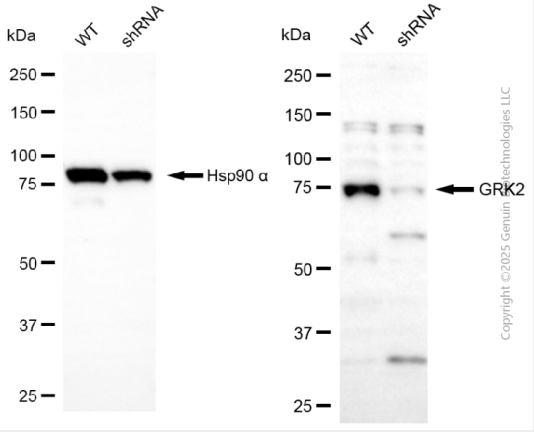

Western blotting analysis using anti-GRK2 antibody (Cat#AGI2114). GRK2 expression in wild-type (WT) and GRK2 shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-GRK2 antibody (Cat#AGI2114, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.