

**GRK2 Antibody**  
**Purified Mouse Monoclonal Antibody (Mab)**  
**Catalog # AP52726**

**Specification**

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**GRK2 Antibody - Product Information**

Application	<b>WB</b>
Primary Accession	<a href="#">P25098</a>
Reactivity	<b>Human</b>
Host	<b>Mouse</b>
Clonality	<b>Monoclonal</b>
Isotype	<b>IgG1</b>
Calculated MW	<b>80 KDa</b>

**GRK2 Antibody - Additional Information**

**Gene ID** 156

**Other Names**

ADRBK 1;ADRBK1;Adrenergic beta receptor kinase 1;Adrenergic beta receptor kinase 1; ARBK1\_HUMAN;BARK 1;BARK;BARK1;Beta adrenergic receptor kinase 1;Beta ARK 1;Beta ARK1; Beta-adrenergic receptor kinase 1;Beta-ARK-1;FLJ16718;G Protein Coupled Receptor Kinase 2;G protein dependent receptor kinase 2;G-protein coupled receptor kinase 2;GRK 2;GRK2.

**Dilution**

WB~~1:500

**Format**

Purified mouse monoclonal in buffer containing 0.1M Tris-Glycine (pH 7.4, 150 mM NaCl) with 0.09% (W/V) sodium azide, 50%,glycerol

**Storage**

Store at -20 °C.Stable for 12 months from date of receipt

**GRK2 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:<a href="http://www.uniprot.org/citations/19715378" target="\_blank">19715378</a>). Key regulator of LPAR1 signaling (PubMed:<a href="http://www.uniprot.org/citations/19306925" target="\_blank">19306925</a>). Competes with RALA for binding to LPAR1 thus affecting the signaling properties of the receptor (PubMed:<a href="http://www.uniprot.org/citations/19306925" target="\_blank">19306925</a>). Desensitizes LPAR1 and LPAR2 in a phosphorylation-

independent manner (PubMed:<a href="http://www.uniprot.org/citations/19306925" target="\_blank">19306925</a>). 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:<a href="http://www.uniprot.org/citations/30284927" target="\_blank">30284927</a>).

#### 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

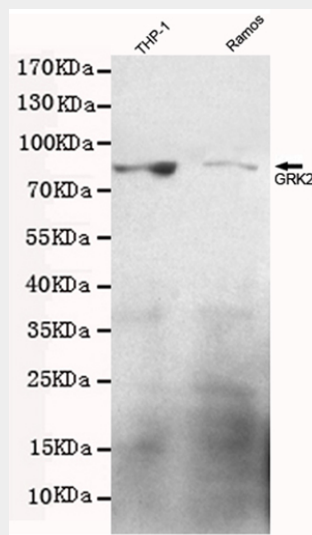
Expressed in peripheral blood leukocytes.

### GRK2 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 Cytometry](#)
- [Cell Culture](#)

### GRK2 Antibody - Images



Western blot detection of GRK2 in Ramos and THP-1 cell lysates using GRK2 mouse mAb (1:500 diluted), with super ECL. Predicted band size: 80KDa. Observed band size: 80KDa. Exposure time: 20S.

### GRK2 Antibody - Background

Specifically phosphorylates the agonist-occupied form of the beta-adrenergic and closely related receptors, probably inducing a desensitization of them. Key regulator of LPAR1 signaling. Competes with RALA for binding to LPAR1 thus affecting the signaling properties of the receptor. Desensitizes

LPAR1 and LPAR2 in a phosphorylation-independent manner.

### **GRK2 Antibody - References**

- Benovic J.L.,et al.FEBS Lett. 283:122-126(1991).  
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Aragay A.M.,et al.Proc. Natl. Acad. Sci. U.S.A. 95:2985-2990(1998).  
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