

**GRK2 Antibody**  
**Rabbit mAb**  
**Catalog # AP90605**

## Specification

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### GRK2 Antibody - Product Information

Application	WB, IHC
Primary Accession	<a href="#">P25098</a>
Reactivity	Rat
Clonality	Monoclonal
<b>Other Names</b>	
GRK2; BARK1; FLJ16718; BETA-ARK1; ADRBK1;	
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	79574 Da

### GRK2 Antibody - Additional Information

Dilution	WB~~1:1000 IHC~~1:100~500
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human GRK2
Description	GRK2 kinase activity and cellular localization are tightly regulated by interactions with activated receptors, G-beta and G-gamma subunits, adaptor proteins, phospholipids, caveolin and calmodulin, as well as by phosphorylation. PKC phosphorylation enhances GRK2 activity by promoting its membrane localization and by abolishing the inhibitory association of calmodulin.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

### 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

<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

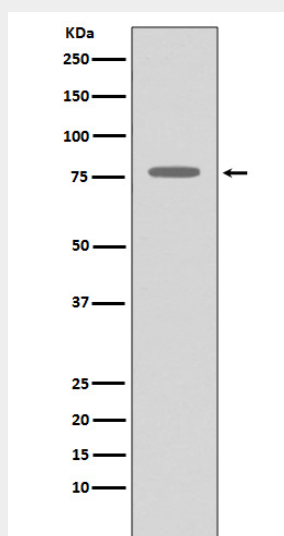
Expressed in peripheral blood leukocytes.

## 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 analysis of GRK2 expression in THP-1 cell lysate.