

**GRK2 (Phospho-Ser685) Antibody**  
Catalog # AP68157**Specification****GRK2 (Phospho-Ser685) Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P25098</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal

**GRK2 (Phospho-Ser685) Antibody - Additional Information****Gene ID** 156**Other Names**

Beta-adrenergic receptor kinase 1 (Beta-ARK-1) (EC 2.7.11.15) (G-protein coupled receptor kinase 2)

**Dilution**

WB~~WB 1:500-2000, ELISA 1:10000-20000

**Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

**Storage Conditions**

-20°C

**GRK2 (Phospho-Ser685) 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](http://www.uniprot.org/citations/19715378)). Key regulator of LPAR1 signaling (PubMed: [19306925](http://www.uniprot.org/citations/19306925)). Competes with RALA for binding to LPAR1 thus affecting the signaling properties of the receptor (PubMed: [19306925](http://www.uniprot.org/citations/19306925)). Desensitizes LPAR1 and LPAR2 in a phosphorylation-independent manner (PubMed: [19306925](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/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

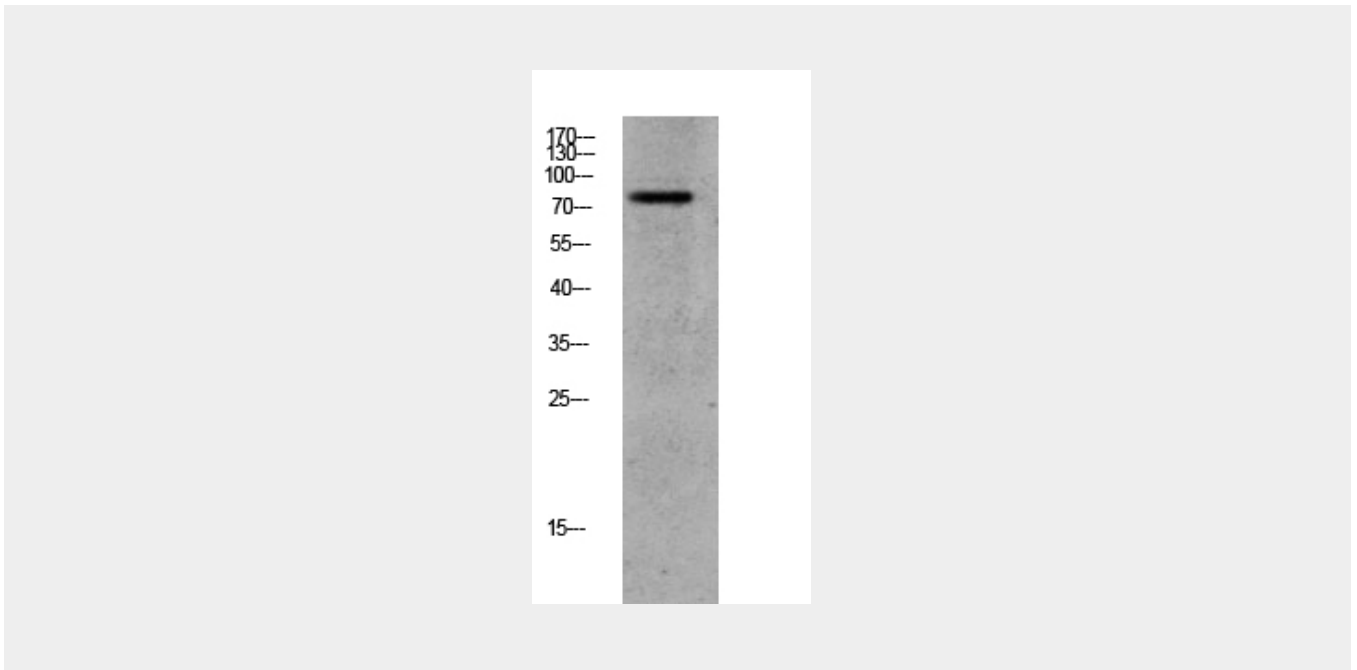
Expressed in peripheral blood leukocytes.

### GRK2 (Phospho-Ser685) 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 (Phospho-Ser685) Antibody - Images



### GRK2 (Phospho-Ser685) 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 (PubMed:19306925, PubMed:19715378). 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).