

# GRK 2 Polyclonal Antibody

Catalog # AP70247

## Product Information

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<b>Application</b>	WB, IHC-P, IF, ICC, E
<b>Primary Accession</b>	<a href="#">P25098</a>
<b>Reactivity</b>	Human, Mouse, Rat
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Calculated MW</b>	79574

## Additional Information

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<b>Gene ID</b>	156
<b>Other Names</b>	ADRBK1; BARK; BARK1; GRK2; Beta-adrenergic receptor kinase 1; Beta-ARK-1; G-protein coupled receptor kinase 2
<b>Dilution</b>	WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/20000. Not yet tested in other applications. IHC-P~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/20000. Not yet tested in other applications. IF~~1:50~200 ICC~~N/A E~~N/A
<b>Format</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
<b>Storage Conditions</b>	-20°C

## Protein Information

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<b>Name</b>	GRK2 ( <a href="#">HGNC:289</a> )
<b>Synonyms</b>	ADRBK1, BARK, BARK1
<b>Function</b>	Specifically phosphorylates the agonist-occupied form of the beta-adrenergic and closely related receptors, probably inducing a desensitization of them (PubMed: <a href="#">19715378</a> ). Phosphorylates catecholamine-activated ADRB2 to regulate physiological cardiomyocyte contraction rate responses (By similarity). Also phosphorylates ligand- bound C3a and C5a anaphylatoxin receptors (C3AR1 and C5AR1, respectively), leading to receptor desensitization (PubMed: <a href="#">21799898</a> , PubMed: <a href="#">23077507</a> ). Key regulator of LPAR1 signaling (PubMed: <a href="#">19306925</a> ). Competes with RALA for binding to LPAR1 thus affecting the signaling properties of the receptor (PubMed: <a href="#">19306925</a> ). Desensitizes LPAR1 and LPAR2 in a phosphorylation-independent manner (PubMed: <a href="#">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:[30284927](#)).

#### Cellular Location

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

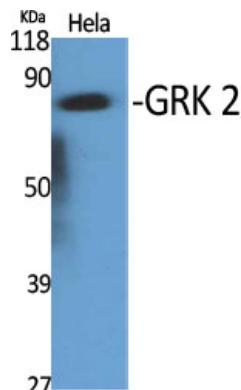
#### Tissue Location

Expressed in peripheral blood leukocytes.

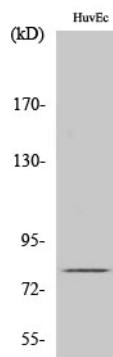
## Background

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).

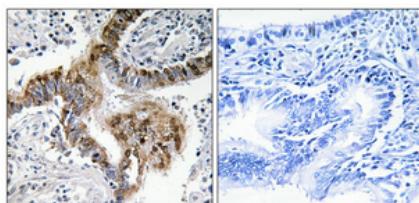
## Images



Western Blot analysis of various cells using GRK 2 Polyclonal Antibody

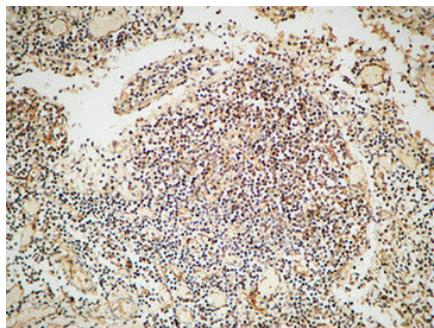


Western Blot analysis of HuvEc cells using GRK 2 Polyclonal Antibody

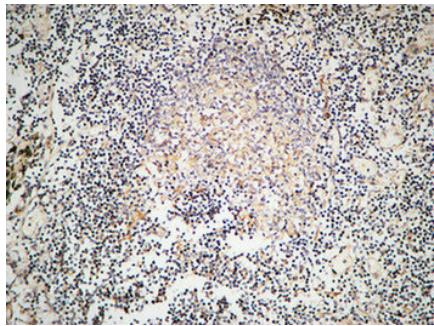


Immunohistochemical analysis of paraffin-embedded Human lung cancer. Antibody was diluted at 1:100(4°,overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negative control (right) obtained from antibody was pre-absorbed by immunogen peptide.

Immunohistochemical analysis of paraffin-embedded Human Lymph gland. 1, Antibody was diluted at 1:100(4°,overnight). 2, High-pressure and temperature



EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).



Immunohistochemical analysis of paraffin-embedded Human Lymph gland. 1, Antibody was diluted at 1:100(4°,overnight). 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.