

GRK 2 (phospho Ser685) Polyclonal Antibody

Catalog # AP67388

Product Information

Application	WB, E
Primary Accession	P25098
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	79574

Additional Information

Gene ID	156
Other Names	ADRBK1; BARK; BARK1; GRK2; Beta-adrenergic receptor kinase 1; Beta-ARK-1; G-protein coupled receptor kinase 2
Dilution	WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/5000. Not yet tested in other applications. E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

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). 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: 21799898 , PubMed: 23077507). 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}

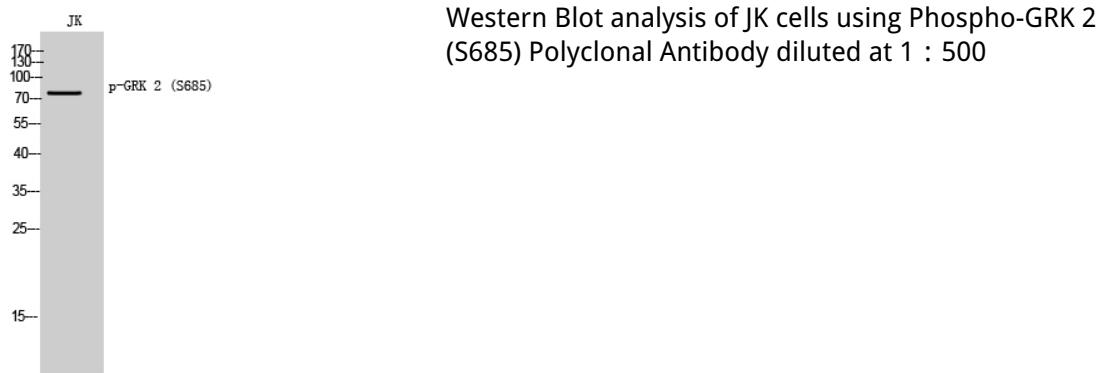
Tissue Location

Expressed in peripheral blood leukocytes.

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



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