

Rabbit GRK2 Polyclonal Antibody | anti-GRK2 antibody

Phospho-GRK2 (Ser670) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA329281	Rabbit	Human, Mouse, Rat	ELISA, Immunocytochemistry, Immunofluorescence

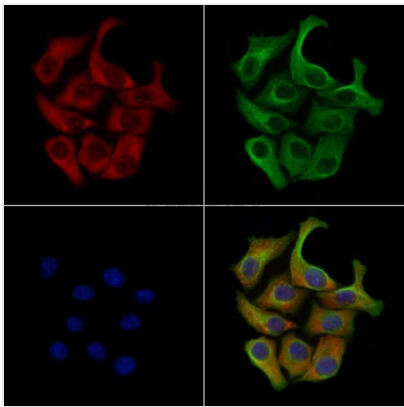
PRODUCT SYNONYMS

GRK2; Polyclonal Antibody; Phospho-GRK2 (Ser670) Antibody; ADRBK1; Adrenergic beta receptor kinase 1; ARBK1_HUMAN; 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 coupled receptor kinase 2; anti-GRK2 antibody

PRODUCT SPECIFICATIONS

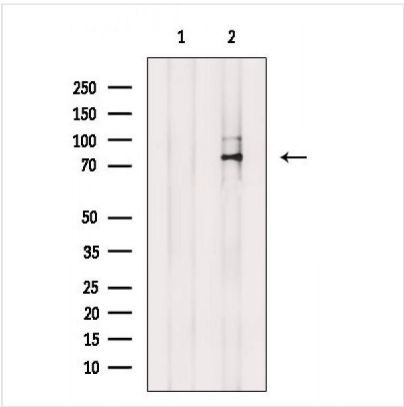
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Phospho-GRK2 (Ser670) Antibody detects endogenous levels of GRK2 only when phosphorylated at Ser670. Tissue Specificity: Expressed in peripheral blood leukocytes.
Purity/Purification	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho-peptide and non-phospho-peptide affinity columns.
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Applicable Applications for anti-GRK2 antibody	ELISA (Peptide ELISA), ICC (Immunocytochemistry), IF (Immunofluorescence)
Immunogen	A synthesized peptide derived from human GRK2 around the phosphorylation site of Ser670.
Conjugation	Unconjugated
Fragment	Fab fragment
Subunit Structure	Interacts with GIT1 (By similarity). Interacts with, and phosphorylates chemokine-stimulated CCR5. Interacts with ARRB1. Interacts with LPAR1 and LPAR2. Interacts with RALA in response to LPAR1 activation. ADRBK1 and RALA mutually inhibit each other's binding to LPAR1. Interacts with ADRB2.
Similarity	The pHdomain binds anionic phospholipids and helps recruiting ADRBK1 from the cytoplasm to plasma membrane close to activated receptors. It mediates binding to G protein beta and gamma subunits, competing with G-alpha subunits and other G-betagamma effectors. Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. GPRK subfamily.
Subcellular Location	Cytoplasm. Cell membrane.
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IF (Immunofluorescence)

Staining HeLa cells(heat shock treatment) by IF/ICC. The samples were fixed with PFA and permeabilized in 0.1% Triton X-100,then blocked in 10% serum for 45 minutes at 25 degree C. Samples were then incubated with primary Ab(AF3697) and mouse anti-beta tubulin Ab(T0023) for 1 hour at 37 degree C. An AlexaFluor594 conjugated goat anti-rabbit IgG(H+L) Ab(Red) and an AlexaFluor488 conjugated goat anti-mouse IgG(H+L) Ab(Green) were used as the secondary antibody.The nuclear counter stain is DAPI (blue).



WB (Western Blot)

Western blot analysis of extracts from 293 cells(UV treatment), using Phospho-GRK2 (Ser670) Antibody. The lane on the left was treated with blocking peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-GRK2 antibody	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. 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).
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NCBI AND UNIPROT INFORMATION

NCBI GI #	148539876
NCBI GeneID	156
NCBI Accession #	NP_001610.2
NCBI GenBank Nucleotide #	NM_001619.3
UniProt Accession #	P25098; Q13837; Q6GTT3; B0ZBE1
Molecular Weight	79,574 Da
NCBI Official Full Name	beta-adrenergic receptor kinase 1
NCBI Official Synonym Full Names	adrenergic, beta, receptor kinase 1
NCBI Official Symbol	ADRBK1
NCBI Official Synonym Symbols	GRK2; BARK1; BETA-ARK1
NCBI Protein Information	beta-adrenergic receptor kinase 1; beta-ARK-1; G-protein coupled receptor kinase 2
UniProt Protein Name	Beta-adrenergic receptor kinase 1
UniProt Gene Name	ADRBK1
UniProt Synonym Gene Names	BARK; BARK1; GRK2; Beta-ARK-1
UniProt Entry Name	ARBK1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

