

DATASHEET

GRK2 (Phospho-S29) Rabbit Polyclonal Antibody

CAT. NO. APA06633

KEY FEATURES

Target	GRK2 (Phospho-S29)	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat, Bovine	Clonality	Polyclonal
Applications	WB, IHC, IF/ICC	Conjugation	Unconjugated
Form / Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.		Storage at -20°C

BACKGROUND

Specifically phosphorylates the agonist-occupied form of the beta-adrenergic and closely related receptors, probably inducing a desensitization of them . Phosphorylates catecholamine-activated ADRB2 to regulate physiological cardiomyocyte contraction rate responses . Also phosphorylates ligand-bound C3a and C5a anaphylatoxin receptors (C3AR1 and C5AR1, respectively), leading to receptor desensitization . 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 .

APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IHC	1:50 - 1:100
IF/ICC	1:50 - 1:200

*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

PRODUCT OVERVIEW

Description	Rabbit polyclonal antibody to GRK2 (Phospho-S29)
Specificity	Recognizes endogenous levels of GRK2 protein only when phosphorylated at S29.
Antibody Type	Primary antibody
Immunogen	KLH-conjugated synthetic phosphopeptide corresponding to residues surrounding S29 of human GRK2 protein. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 79 kD; Observed: 80 kD
Form/Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	BARK; BARK1; GRK2; Beta-adrenergic receptor kinase 1; Beta-ARK-1; G-protein coupled receptor kinase 2
Gene Symbol	ADRBK1
Entrez Gene	156(Human); 25238(Rat)
SwissProt	P25098(Human); Q99MK8(Mouse); P26817(Rat)

*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact info@arex.bio or your local distributor.

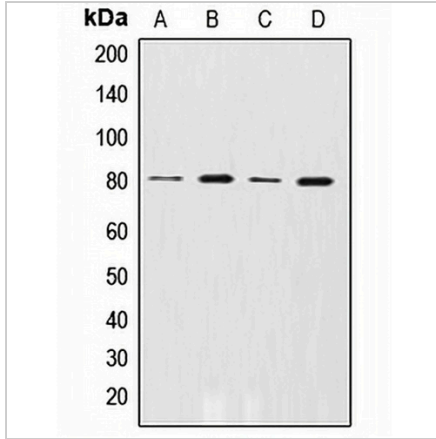
*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

DATASHEET

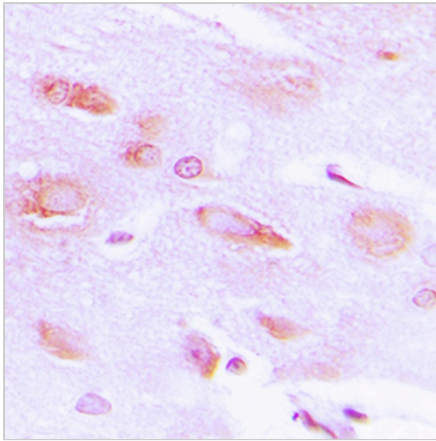
GRK2 (Phospho-S29) Rabbit Polyclonal Antibody

CAT. NO. APA06633

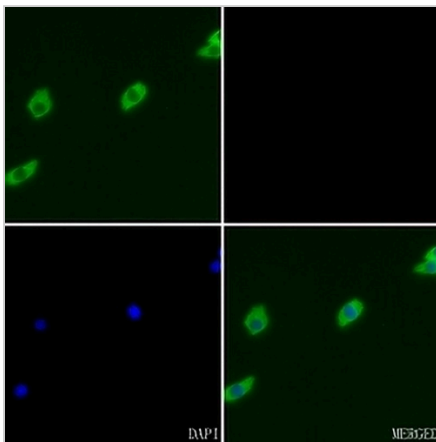
DATA



Western blot analysis of GRK2 (Phospho-S29) expression in Ramos (A), THP1 (B), U937 (C), C6 (D) whole cell lysates. (Predicted band size: 79 kD; Observed band size: 80 kD)



Immunohistochemical analysis of GRK2 (Phospho-S29) staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of GRK2 (Phospho-S29) staining in C6 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a AREX® Fluor 488 -conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AREX® Fluor 594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

STORAGE

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

NOTE

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.