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GRK4 Rabbit pAb

Catalog # AP96553

Product Information

Application	WB
Primary Accession	P32298
Other Accession	P32298
Reactivity	Mouse
Predicted	Rat, Human, Chicken
Host	Rabbit
Clonality	Polyclonal
Calculated MW	66583
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human GRK4
Epitope Specificity	201-300/578
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. GPRK subfamily. Contains 1 AGC-kinase C-terminal domain. Contains 1 protein kinase domain. Contains 1 RGS domain.
Post-translational modifications	Palmitoylated.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene encodes a member of the guanine nucleotide-binding protein (G protein)-coupled receptor kinase subfamily of the Ser/Thr protein kinase family. The protein phosphorylates the activated forms of G protein-coupled receptors thus initiating its deactivation. This gene has been linked to both genetic and acquired hypertension. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Nov 2013]

Additional Information

Gene ID	2868
Other Names	GPRK2L; GPRK4; GRK4a; IT11; A830025H08Rik; GRK; GRK4_HUMAN; GRK4; G protein-coupled receptor kinase GRK4; ITI1; 2.7.11.16; GRK4_MOUSE; GRK4_RAT; G protein-coupled receptor kinase 4; G protein-coupled receptor kinase 2-like (Drosophila)
Dilution	WB=1:500-2000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	GRK4 {ECO:0000303|PubMed:26134571, ECO:0000312|HGNC:HGNC:4543}
Function	Specifically phosphorylates the activated forms of G protein- coupled receptors, such as ADRB2, DRD1 and DRD3 (PubMed:16338988, PubMed:19520868). Such receptor phosphorylation initiates beta-arrestin-mediated receptor internalization, and signaling events leading to their desensitization (PubMed:16338988, PubMed:19520868). Mediates phosphorylation of DRD1 in the absence of dopamine activation, resulting in constitutive desensitization (PubMed:16338988).
Cellular Location	Cytoplasm. Cytoplasm, cell cortex. Note=Both at the cell surface and dispersed in the cytoplasm under basal conditions (PubMed:8626439). Receptor stimulation results in the internalization of GRK4 to the perinuclear area, where colocalization with DRD3 is observed strongly at 5 and 15 minutes (PubMed:19520868). DRD3 and GRK4 colocalize in lipid rafts of renal proximal tubule cells (PubMed:19520868).
Tissue Location	Isoform 1, isoform 2, isoform 3, and isoform 4 are expressed in testis. Isoform 4 is expressed in myometrium

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