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GRK6 Rabbit pAb

Catalog # AP97660

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	P43250
Other Accession	P43250
Predicted	Rat, Pig, Human, Mouse, Rabbit, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	65991
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human GRK6
Epitope Specificity	181-280/576
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	It is uncertain whether palmitoylation is on Cys-561 and/or Cys-562 and/or Cys-565.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Heterotrimeric G protein-mediated signal transduction is a dynamically regulated process with the intensity of signal decreasing over time despite the continued presence of the agonist. This phenomenon, referred to as agonist-mediated desensitization, involves phosphorylation of the receptor by two classes of enzymes. The first class is comprised of the second messenger-regulated kinases, such as c-AMP dependent protein kinase A and protein kinase C. The second class includes the G protein-coupled receptor kinases (GRKs). At least seven members of the GRK family have been identified. These include rhodopsin kinase (GRK 1), two forms of Beta-adrenergic receptor kinase: GRK 2 (Beta ARK, Beta ARK1) and GRK 3 (Beta ARK2), IT-11 (GRK 4), GRK 5, GRK 6 and GRK 7. Phosphorylation of receptors by GRKs appears to be strictly dependent on the receptor being in its agonist-activated state.

Additional Information

Gene ID	2870
Other Names	GPRK6; GRK6_HUMAN; GRK6; G protein-coupled receptor kinase GRK6; 2.7.11.16; GRK6_MOUSE; GRK6_RAT; G protein-coupled receptor kinase 6
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000

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	GRK6
Synonyms	GPRK6
Function	Specifically phosphorylates the activated forms of G protein- coupled receptors (PubMed:19423652, PubMed:20048153). Such receptor phosphorylation initiates beta-arrestin-mediated receptor internalization, and signaling events leading to their desensitization (PubMed:19423652, PubMed:20048153). Seems to be involved in the desensitization of D2-like dopamine receptors in striatum and chemokine receptor CXCR4 which is critical for CXCL12-induced cell chemotaxis (PubMed:20048153). Phosphorylates rhodopsin (RHO) (in vitro) and a non G protein-coupled receptor: LRP6 during Wnt signaling (in vitro) (PubMed:19801552).
Cellular Location	Membrane; Lipid-anchor.
Tissue Location	Widely expressed..

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