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GRK6 Antibody

Catalog # ASC11746

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	P43250
Other Accession	NP_001004106, 51896039
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	65991
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	GRK6 antibody can be used for detection of GRK6 by Western blot at 1 - 2 g/ml. Antibody can also be used for Immunohistochemistry starting at 5 g/mL. For immunofluorescence start at 20 g/mL.

Additional Information

Gene ID	2870
Other Names	G protein-coupled receptor kinase 6, 2.7.11.16, G protein-coupled receptor kinase GRK6, GRK6, GPRK6
Target/Specificity	GRK6; GRK6 antibody is human, mouse and rat reactive. Multiple isoforms of GRK6 are known to exist. This antibody is predicted to not cross-react with other members of the GRK protein family.
Reconstitution & Storage	GRK6 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year.
Precautions	GRK6 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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..

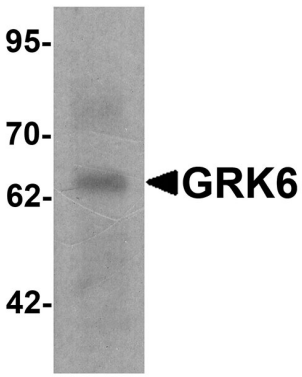
Background

The G protein–coupled receptor kinases (GRKs) are a versatile family of kinases that play a critical role in cancer metastasis through their regulation of G-protein coupled receptors (GPCRs) involved in growth factor mediated cell migration (1,2). Phosphorylation of receptors by GRKs appears to be strictly dependent on the receptor being in its agonist-activated state (1). GRK6 is one of 7 members of the GRK serine/threonine kinase subfamily, which has been shown to modulate the Wnt signaling pathway via phosphorylation of LRP6 (3,4), and the insulin-like growth factor signaling pathway (4). GRK6 may also play a role in immune system function (5).

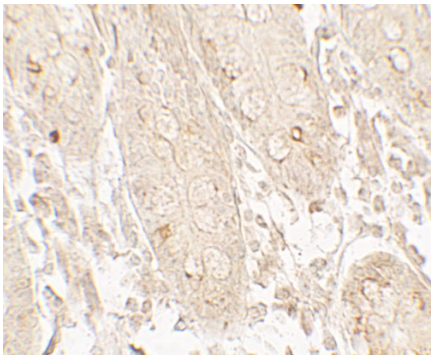
References

Inglese J, Freedman NJ, Koch WJ, et al. Structure and mechanism of the G protein-coupled receptor kinases. J. Biol. Chem. 1993; 268:23735-8.
Raghuwanshi SK, Smith N, Rivers EJ, et al. G protein-coupled receptor kinase 6 deficiency promotes angiogenesis, tumor progression, and metastasis. J. Immunol. 2013; 190:5329-36.
Benovic JL and Gomez J. Molecular cloning and expression of GRK6. A new member of the G protein-coupled receptor kinase family. J. Biol. Chem. 1993; 268:19521-7.
Chen M, Philipp M, Wang J, et al. G Protein-coupled receptor kinases phosphorylate LRP6 in the Wnt pathway. J. Biol. Chem. 2009; 284:35040-8.

Images

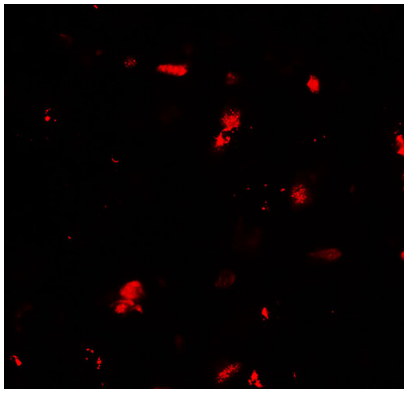


Western blot analysis of GRK6 in rat small intestine tissue lysate with GRK6 antibody at 1 µg/ml.



Immunohistochemistry of GRK6 in human small intestine tissue with GRK6 antibody at 5 µg/mL.

Immunofluorescence of GRK6 in human small intestine



tissue with GRK6 antibody at 20 µg/mL.

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