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GRK6 Antibody
Catalog # ASC11746

Specification

GRK6 Antibody - Product Information

Application	**WB, IHC-P, IF, E**
Primary Accession	P43250
Other Accession	NP_001004106, 51896039
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**Predicted: 63 kDa** **Observed: 63 kDa KDa**
Application Notes	**GRK6 antibody can be used for detection of GRK6 by Western blot at 1 - 2 µg/ml. Antibody can also be used for Immunohistochemistry starting at 5 µg/mL. For immunofluorescence start at 20 µg/mL.**

GRK6 Antibody - Additional Information

Gene ID **2870**

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.

GRK6 Antibody - Protein Information

Name GRK6

Synonyms GPRK6

Function
Specifically phosphorylates the activated forms of G protein- coupled receptors. Such receptor phosphorylation initiates beta- arrestin-mediated receptor desensitization, internalization, and signaling events leading to their desensitization. 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 (By similarity). Phosphorylates rhodopsin (RHO) (in vitro) and a non G-protein-coupled receptor: LRP6 during Wnt signaling (in vitro).

Cellular Location
Membrane; Lipid-anchor.

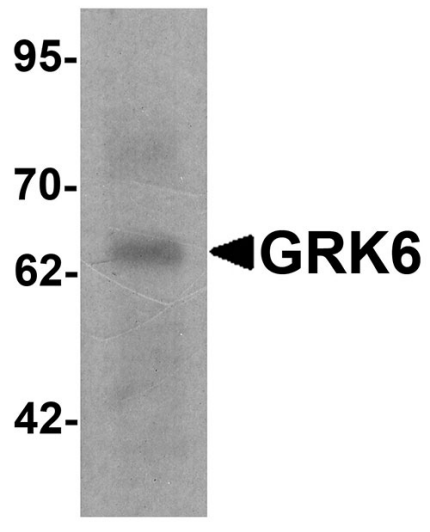
Tissue Location
Widely expressed..

GRK6 Antibody - Protocols

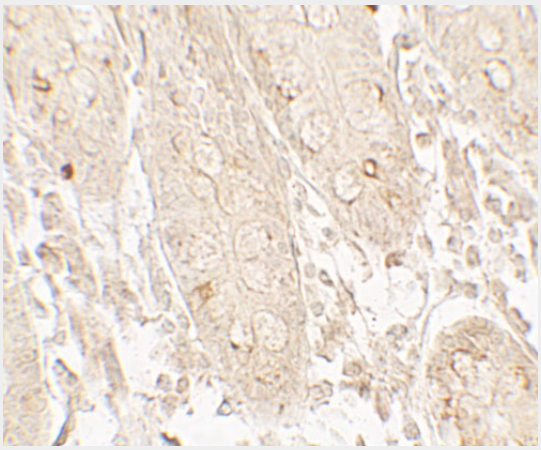
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

GRK6 Antibody - Images



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



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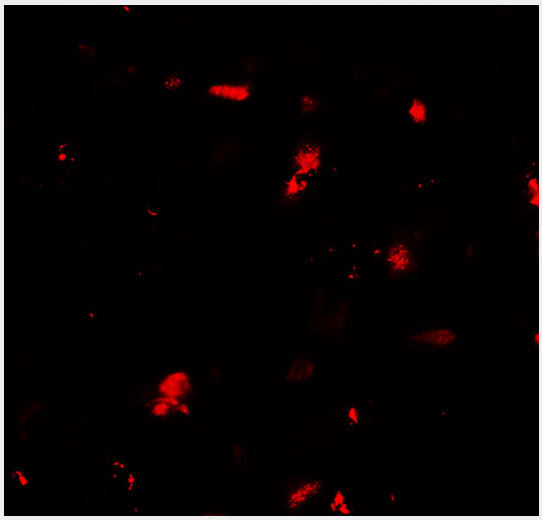
Immunohistochemistry of GRK6 in human small intestine tissue with GRK6 antibody at 5 µg/mL.



Immunofluorescence of GRK6 in human small intestine tissue with GRK6 antibody at 20 µg/mL.

GRK6 Antibody - 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).

GRK6 Antibody - 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.