

### **GRK6 Antibody**

Catalog # ASC11746

# **Specification**

## **GRK6 Antibody - Product Information**

Application WB, IHC, IF
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  $\mu$ g/ml.

Antibody can also be used for

Immunohistochemistry starting at 5  $\mu$ g/mL. For immunofluorescence start at 20  $\mu$ g/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°C for three months and -20°C, 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.

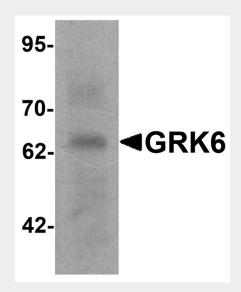
**Tissue Location** Widely expressed..

## **GRK6 Antibody - Protocols**

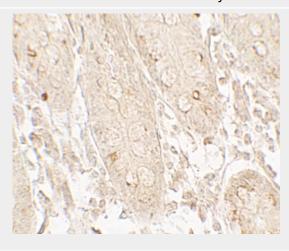
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# **GRK6 Antibody - Images**

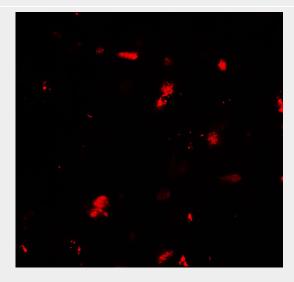


Western blot analysis of GRK6 in rat small intestine tissue lysate with GRK6 antibody at 1 µg/ml.





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.