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# GRK1 Antibody (C-term)
**Purified Rabbit Polyclonal Antibody (Pab)**
**Catalog # AP7003a**

## Specification

### GRK1 Antibody (C-term) - Product Information

| | |
|---|---|
| Application | **IHC-P, WB,E** |
| Primary Accession | Q15835 |
| Reactivity | **Human, Mouse** |
| Host | **Rabbit** |
| Clonality | **Polyclonal** |
| Isotype | **Rabbit IgG** |
| Calculated MW | **63526** |
| Antigen Region | **520-550** |

### GRK1 Antibody (C-term) - Additional Information

**Gene ID** 6011

**Other Names**
Rhodopsin kinase, RK, G protein-coupled receptor kinase 1, GRK1, RHOK

**Target/Specificity**
This GRK1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 520-550 amino acids from the C-terminal region of human GRK1.

**Dilution**
IHC-P~~1:50~100
WB~~1:1000
E~~Use at an assay dependent concentration.

**Format**
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**Storage**
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**
GRK1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### GRK1 Antibody (C-term) - Protein Information

**Name** GRK1 (HGNC:10013)

**Synonyms** RHOK

**Function** Retina-specific kinase involved in the signal turnoff via phosphorylation of rhodopsin (RHO), the G protein- coupled receptor that initiates the phototransduction cascade (PubMed:15946941). This rapid desensitization is essential for scotopic vision and permits rapid adaptation to changes in illumination (By similarity). May play a role in the maintenance of the outer nuclear layer in the retina (By similarity).

**Cellular Location**
Membrane {ECO:0000250|UniProtKB:P28327}; Lipid- anchor {ECO:0000250|UniProtKB:P28327}. Cell projection, cilium, photoreceptor outer segment {ECO:0000250|UniProtKB:Q9WVL4} Note=Subcellular location is not affected by light or dark conditions {ECO:0000250|UniProtKB:Q9WVL4}

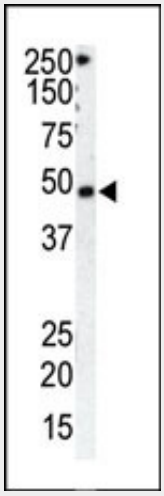
**Tissue Location**
Retinal-specific. Expressed in rods and cones cells.

## GRK1 Antibody (C-term) - Protocols

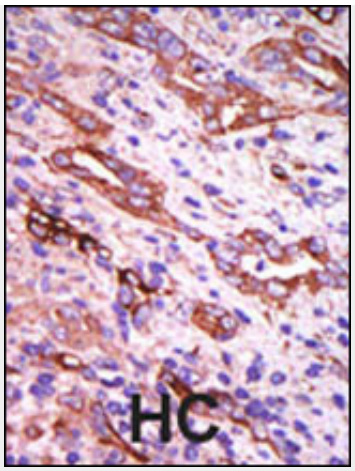
Provided below are standard protocols that you may find useful for product applications.

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

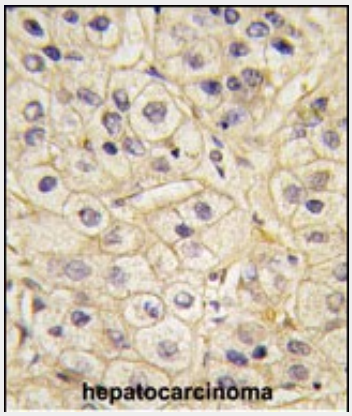
## GRK1 Antibody (C-term) - Images




The anti-GRK1 Pab (Cat. #AP7003a) is used in Western blot to detect GRK1 in HeLa cell lysate (Lane 1) and mouse spleen tissue lysate (Lane 2).




Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.




Formalin-fixed and paraffin-embedded human hepatocarcinoma tissue reacted with GRK1 Antibody (C-term) (Cat.#AP7003a), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

**GRK1 Antibody (C-term) - Background**

Protein kinases are enzymes that transfer a phosphate group from a phosphate donor, generally the g phosphate of ATP, onto an acceptor amino acid in a substrate protein. By this basic mechanism, protein kinases mediate most of the signal transduction in eukaryotic cells, regulating cellular metabolism, transcription, cell cycle progression, cytoskeletal rearrangement and cell movement, apoptosis, and differentiation. With more than 500 gene products, the protein kinase family is one of the largest families of proteins in eukaryotes. The family has been classified in 8 major groups based on sequence comparison of their tyrosine (PTK) or serine/threonine (STK) kinase catalytic domains. The AGC kinase group consists of 63 kinases including the cyclic nucleotide-regulated protein kinase (PKA & PKG) family, the diacylglycerol-activated/phospholipid-dependent protein kinase C (PKC) family, the related to PKA and PKC (RAC/Akt) protein kinase family, the kinases that phosphorylate G protein-coupled receptors family (ARK), and the kinases that phosphorylate ribosomal protein S6 family (RSK). The AGC kinase group consists of 63 kinases including the cyclic nucleotide-regulated protein kinase (PKA & PKG) family, the diacylglycerol-activated/phospholipid-dependent protein kinase C (PKC) family, the related to PKA and PKC (RAC/Akt) protein kinase family, the kinases that phosphorylate G protein-coupled receptors family (ARK), and the kinases that phosphorylate

ribosomal protein S6 family (RSK).

**GRK1 Antibody (C-term) - References**

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Zhao, X., et al., Vis. Neurosci. 14(2):225-232 (1997).
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