

**GRK7 Antibody (C-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP8142b****Specification**

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**GRK7 Antibody (C-term) Blocking Peptide - Product Information**Primary Accession [Q8WTQ7](#)**GRK7 Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 131890**Other Names**

G protein-coupled receptor kinase 7, G protein-coupled receptor kinase GRK7, GRK7, GPRK7

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP8142b](/product/products/AP8142b) was selected from the C-term region of human GRK7. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**GRK7 Antibody (C-term) Blocking Peptide - Protein Information****Name** GRK7**Synonyms** GPRK7**Function**

Retina-specific kinase involved in the shutoff of the photoresponse and adaptation to changing light conditions via cone opsin phosphorylation, including rhodopsin (RHO).

**Cellular Location**

Membrane {ECO:0000250|UniProtKB:Q8WMV0}; Lipid- anchor {ECO:0000250|UniProtKB:Q8WMV0}

**Tissue Location**

Retinal cones, outer and inner segments.

## **GRK7 Antibody (C-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

## **GRK7 Antibody (C-term) Blocking Peptide - Images**

## **GRK7 Antibody (C-term) Blocking Peptide - Background**

Protein kinases are enzymes that transfer a phosphate group from a phosphate donor, generally the  $\gamma$  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).

## **GRK7 Antibody (C-term) Blocking Peptide - References**

Weiss, E.R., et al., J. Neurosci. 21(23):9175-9184 (2001). Chen, C.K., et al., Mol. Vis. 7, 305-313 (2001).