

**PI3KR4 Antibody (N-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP8026a****Specification**

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**PI3KR4 Antibody (N-term) Blocking Peptide - Product Information**

Primary Accession [O99570](#)  
Other Accession [NP\\_055417](#)

**PI3KR4 Antibody (N-term) Blocking Peptide - Additional Information**

**Gene ID** 30849

**Other Names**

Phosphoinositide 3-kinase regulatory subunit 4, PI3-kinase regulatory subunit 4, PI3-kinase p150 subunit, Phosphoinositide 3-kinase adaptor protein, PIK3R4

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP8026a](/product/products/AP8026a) was selected from the N-term region of human PI3KR4 . 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.

**PI3KR4 Antibody (N-term) Blocking Peptide - Protein Information**

**Name** PIK3R4

**Synonyms** VPS15 {ECO:0000303|PubMed:23878393}

**Function**

Regulatory subunit of the PI3K complex that mediates formation of phosphatidylinositol 3-phosphate; different complex forms are believed to play a role in multiple membrane trafficking pathways: PI3KC3-C1 is involved in initiation of autophagosomes and PI3KC3-C2 in maturation of autophagosomes and endocytosis. Involved in regulation of degradative endocytic trafficking and cytokinesis, probably in the context of PI3KC3-C2 (PubMed:<http://www.uniprot.org/citations/20643123> target="\_blank">20643123</a>).

**Cellular Location**

Late endosome. Cytoplasmic vesicle, autophagosome. Membrane; Lipid-anchor. Note=As component of the PI3K complex I localized to pre-autophagosome structures. As component of the PI3K complex II localized predominantly to endosomes. Localizes also to discrete punctae along the ciliary axoneme (By similarity) {ECO:0000250|UniProtKB:Q8VD65, ECO:0000305}

**Tissue Location**

Ubiquitously expressed.

**PI3KR4 Antibody (N-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

**PI3KR4 Antibody (N-term) Blocking Peptide - Images****PI3KR4 Antibody (N-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.

**PI3KR4 Antibody (N-term) Blocking Peptide - References**

Panaretou, C., et al., J. Biol. Chem. 272(4):2477-2485 (1997).