

**AK5 Antibody (C-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP8131b****Specification**

---

**AK5 Antibody (C-term) Blocking Peptide - Product Information**Primary Accession [Q9Y6K8](#)**AK5 Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 26289**Other Names**

Adenylate kinase isoenzyme 5, AK 5, ATP-AMP transphosphorylase 5, AK5

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP8131b](/products/AP8131b) was selected from the C-term region of human AK5. 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.

**AK5 Antibody (C-term) Blocking Peptide - Protein Information****Name** AK5**Function**

Nucleoside monophosphate (NMP) kinase that catalyzes the reversible transfer of the terminal phosphate group between nucleoside triphosphates and monophosphates. Active on AMP and dAMP with ATP as a donor. When GTP is used as phosphate donor, the enzyme phosphorylates AMP, CMP, and to a small extent dCMP. Also displays broad nucleoside diphosphate kinase activity.

**Cellular Location**

Cytoplasm.

**Tissue Location**

Brain specific..

## **AK5 Antibody (C-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

## **AK5 Antibody (C-term) Blocking Peptide - Images**

## **AK5 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).

## **AK5 Antibody (C-term) Blocking Peptide - References**

Strausberg, R.L., et al., Proc. Natl. Acad. Sci. U.S.A. 99(26):16899-16903 (2002). Van Rompay, A.R., et al., Eur. J. Biochem. 261(2):509-517 (1999).