

HK3 (Hexokinase III) Antibody (N-term) Blocking peptide
Synthetic peptide
Catalog # BP8139a**Specification**

HK3 (Hexokinase III) Antibody (N-term) Blocking peptide - Product InformationPrimary Accession [P52790](#)**HK3 (Hexokinase III) Antibody (N-term) Blocking peptide - Additional Information****Gene ID** 3101**Other Names**

Hexokinase-3, Hexokinase type III, HK III, HK3

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP8139a](/product/products/AP8139a) was selected from the N-term region of human HK3. 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.

HK3 (Hexokinase III) Antibody (N-term) Blocking peptide - Protein Information**Name** HK3 ([HGNC:4925](#))**Function**

Catalyzes the phosphorylation of hexose, such as D-glucose and D-fructose, to hexose 6-phosphate (D-glucose 6-phosphate and D-fructose 6-phosphate, respectively) (PubMed: [8717435](http://www.uniprot.org/citations/8717435)). Mediates the initial step of glycolysis by catalyzing phosphorylation of D-glucose to D-glucose 6-phosphate (PubMed: [8717435](http://www.uniprot.org/citations/8717435)).

HK3 (Hexokinase III) Antibody (N-term) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

HK3 (Hexokinase III) Antibody (N-term) Blocking peptide - Images

HK3 (Hexokinase III) Antibody (N-term) Blocking peptide - Background

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

HK3 (Hexokinase III) Antibody (N-term) Blocking peptide - References

Furuta, H., et al., Genomics 36(1):206-209 (1996). Palma, F., et al., Mol. Cell. Biochem. 155(1):23-29 (1996). Colosimo, A., et al., Cytogenet. Cell Genet. 74(3):187-188 (1996).