

**PANK4 Antibody (C-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP7162b****Specification**

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**PANK4 Antibody (C-term) Blocking Peptide - Product Information**Primary Accession [Q9NVE7](#)**PANK4 Antibody (C-term) Blocking Peptide - Additional Information**

Gene ID 55229

**Other Names**

Pantothenate kinase 4, hPanK4, Pantothenic acid kinase 4, PANK4

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP7162b](/product/products/AP7162b) was selected from the C-term region of human PANK4. 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.

**PANK4 Antibody (C-term) Blocking Peptide - Protein Information**Name PANK4 ([HGNC:19366](#))**Function**

Phosphatase which shows a preference for 4'-phosphopantetheine and its oxidatively damaged forms (sulfonate or S-sulfonate), providing strong indirect evidence that the phosphatase activity pre-empts damage in the coenzyme A (CoA) pathway (PubMed:[27322068](http://www.uniprot.org/citations/27322068)). Hydrolyzing excess 4'-phosphopantetheine could constitute a directed overflow mechanism to prevent its oxidation to the S-sulfonate, sulfonate, or other forms (PubMed:[27322068](http://www.uniprot.org/citations/27322068)). Hydrolyzing 4'-phosphopantetheine sulfonate or S-sulfonate would forestall their conversion to inactive forms of CoA and acyl carrier protein (PubMed:[27322068](http://www.uniprot.org/citations/27322068)). May play a role in the physiological regulation of CoA intracellular levels (Probable).

**Cellular Location**

Cytoplasm {ECO:0000250|UniProtKB:Q923S8}.

**Tissue Location**

Widely expressed with high expression in the muscle (PubMed:11479594). Expressed in the retina and lens epithelium, mainly in ganglion cell layer, outer plexiform layer and retinal pigment layer (at protein level) (PubMed:30585370).

**PANK4 Antibody (C-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

**PANK4 Antibody (C-term) Blocking Peptide - Images****PANK4 Antibody (C-term) Blocking Peptide - Background**

PANK4 belongs to the pantothenate kinase family. Pantothenate kinase is a key regulatory enzyme in the biosynthesis of coenzyme A (CoA) in bacteria and mammalian cells. It catalyzes the first committed step in the universal biosynthetic pathway leading to CoA and is itself subject to regulation through feedback inhibition by CoA. This family member is most abundant in muscle but is expressed in all tissues.

**PANK4 Antibody (C-term) Blocking Peptide - References**

Zhou, B., et al., Nat. Genet. 28(4):345-349 (2001). Robishaw, J.D., et al., Am. J. Physiol. 248 (1 PT 1), E1-E9 (1985) (): ().