

**PNCK Antibody (C-term R331) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP7097b****Specification**

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**PNCK Antibody (C-term R331) Blocking Peptide - Product Information**Primary Accession [Q6P2M8](#)**PNCK Antibody (C-term R331) Blocking Peptide - Additional Information****Gene ID** 139728**Other Names**

Calcium/calmodulin-dependent protein kinase type 1B, CaM kinase I beta, CaM kinase IB, CaM-KI beta, CaMKI-beta, Pregnancy up-regulated non-ubiquitously-expressed CaM kinase, PNCK

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP7097b](/products/AP7097b) was selected from the C-term region of human PNCK. 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.

**PNCK Antibody (C-term R331) Blocking Peptide - Protein Information****Name** PNCK**Function**

Calcium/calmodulin-dependent protein kinase belonging to a proposed calcium-triggered signaling cascade. In vitro phosphorylates CREB1 and SYN1/synapsin I. Phosphorylates and activates CAMK1 (By similarity).

**Cellular Location**

Cytoplasm. Nucleus.

**PNCK Antibody (C-term R331) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

#### **PNCK Antibody (C-term R331) Blocking Peptide - Images**

#### **PNCK Antibody (C-term R331) Blocking Peptide - Background**

Calcium/calmodulin-dependent protein kinase (PNCK) belongs to a proposed calcium-triggered signaling cascade. In vitro it phosphorylates CREB1 and SYN1/synapsin I, and phosphorylates and activates CAMK1. 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.

#### **PNCK Antibody (C-term R331) Blocking Peptide - References**

Gardner, H.P., et al., Cancer Res. 60(19):5571-5577 (2000). Gardner, H.P., et al., Genomics. 63(2):279-288 (2000).