

Catalog # BP7710a

HCK Antibody (N-term) Blocking Peptide Synthetic peptide

## Specification

# HCK Antibody (N-term) Blocking Peptide - Product Information

Primary Accession

<u>P08631</u>

## HCK Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 3055

**Other Names** Tyrosine-protein kinase HCK, Hematopoietic cell kinase, Hemopoietic cell kinase, p59-HCK/p60-HCK, p59Hck, p61Hck, HCK

## Target/Specificity

The synthetic peptide sequence used to generate the antibody <a href=/product/products/AP7710a>AP7710a</a> was selected from the N-term region of human HCK . 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.

### HCK Antibody (N-term) Blocking Peptide - Protein Information

Name HCK

#### Function

Non-receptor tyrosine-protein kinase found in hematopoietic cells that transmits signals from cell surface receptors and plays an important role in the regulation of innate immune responses, including neutrophil, monocyte, macrophage and mast cell functions, phagocytosis, cell survival and proliferation, cell adhesion and migration. Acts downstream of receptors that bind the Fc region of immunoglobulins, such as FCGR1A and FCGR2A, but also CSF3R, PLAUR, the receptors for IFNG, IL2, IL6 and IL8, and integrins, such as ITGB1 and ITGB2. During the phagocytic process, mediates mobilization of secretory lysosomes, degranulation, and activation of NADPH oxidase to bring about the respiratory burst. Plays a role in the release of inflammatory molecules. Promotes reorganization of the actin cytoskeleton and actin polymerization, formation of podosomes and cell protrusions. Inhibits TP73-mediated transcription activation and TP73-mediated apoptosis.



Phosphorylates ADAM15, BCR, ELMO1, FCGR2A, GAB1, GAB2, RAPGEF1, STAT5B, TP73, VAV1 and WAS.

### **Cellular Location**

[Isoform 1]: Lysosome. Membrane; Lipid-anchor. Cell projection, podosome membrane; Lipid-anchor. Cytoplasm, cytosol Note=Associated with specialized secretory lysosomes called azurophil granules. At least half of this isoform is found in the cytoplasm, some of this fraction is myristoylated Cytoplasmic vesicle, secretory vesicle. Cytoplasm, cytosol

#### **Tissue Location**

Detected in monocytes and neutrophils (at protein level). Expressed predominantly in cells of the myeloid and B-lymphoid lineages. Highly expressed in granulocytes. Detected in tonsil

### HCK Antibody (N-term) Blocking Peptide - Protocols

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

#### <u>Blocking Peptides</u>

### HCK Antibody (N-term) Blocking Peptide - Images

# HCK Antibody (N-term) Blocking Peptide - Background

HCK is a protein-tyrosine kinase that is predominantly expressed in hemopoietic cell types. The encoded protein may help couple the Fc receptor to the activation of the respiratory burst. In addition, it may play a role in neutrophil migration and in the degranulation of neutrophils. Alternate translation initiation site usage, including a non-AUG (CUG) codon, results in the production of two different isoforms, that have different subcellular localization.

### HCK Antibody (N-term) Blocking Peptide - References

Komuro, I., et al., J. Exp. Med. 198(3):443-453 (2003).Lake, J.A., et al., J. Clin. Virol. 26(2):143-152 (2003).Stanglmaier, M., et al., Leukemia 17(2):283-289 (2003).Lerner, E.C., et al., Nat. Struct. Biol. 9(5):365-369 (2002).Chang, A.H., et al., Eur. J. Immunol. 31(8):2382-2387 (2001).