10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

HCK Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP7710a

Specification

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

Primary Accession P08631

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 AP7710a 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 CBL in response to activation of immunoglobulin gamma Fc region receptors.

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.

- Blocking Peptides

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).