

HCK Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7710d

Specification

HCK Antibody (N-term) - Product Information

Application WB, IHC-P,E

Primary Accession P08631

Other Accession <u>P50545</u>, <u>P08103</u>, <u>Q95M30</u>, <u>NP 002101</u>

Reactivity Human

Predicted Monkey, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Antigen Region 131-156

HCK Antibody (N-term) - 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

This HCK antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 131-156 amino acids from the N-terminal region of human HCK.

Dilution

WB~~1:1000 IHC-P~~1:50~100

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

HCK Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

HCK Antibody (N-term) - 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

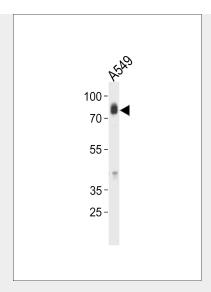
HCK Antibody (N-term) - Protocols

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

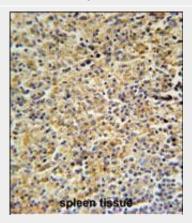
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

HCK Antibody (N-term) - Images





HCK Antibody (N-term) (Cat. #AP7710d) western blot analysis in A549 cell line lysates (35ug/lane). This demonstrates the HCK antibody detected the HCK protein (arrow).



HCK Antibody (N-term) (Cat. #AP7710d) immunohistochemistry analysis in formalin fixed and paraffin embedded human spleen tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the HCK Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

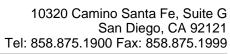
HCK Antibody (N-term) - Background

HCK is a member of the Src

family of tyrosine kinases. This protein is primarily hemopoietic, particularly in cells of the myeloid and B-lymphoid lineages. It 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. Multiple isoforms with different subcellular distributions are produced due to both alternative splicing and the use of alternative translation initiation codons, including a non-AUG (CUG) codon. [provided by RefSeq].

HCK Antibody (N-term) - References

Hassan, R., et al. J. Cell. Physiol. 221(2):458-468(2009) Kennah, E., et al. Blood 113(19):4646-4655(2009) Voss, M., et al. BMC Immunol. 10, 53 (2009):





Rikova, K., et al. Cell 131(6):1190-1203(2007)