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HCK Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7710d

Product Information

Application	IHC-P, FC, WB, E
Primary Accession	P08631
Other Accession	P50545, P08103, Q95M30, NP_002101
Reactivity	Human, Rat, Mouse
Predicted	Monkey, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	59600
Antigen Region	131-156

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	IHC-P~~1:100~500 FC~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration.
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.

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

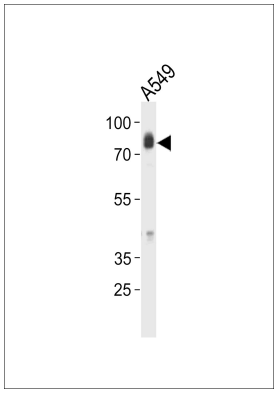
Background

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].

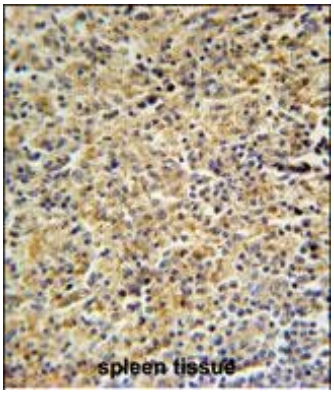
References

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Kennah, E., et al. Blood 113(19):4646-4655(2009)
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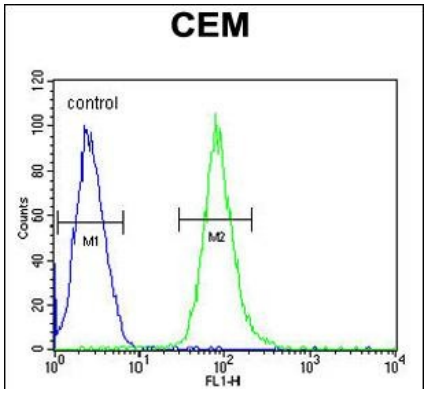
Images



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) (Cat. #AP7710d) flow cytometric analysis of CEM cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.