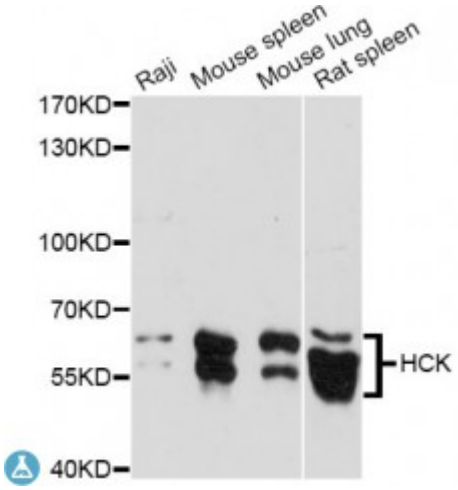
Anti-HCK Antibody



Description	The protein encoded by this gene 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.
Model	STJ116748
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	WB
Immunogen	Recombinant fusion protein containing a sequence corresponding to amino acids 324-505 of human HCK (NP_001165600.1).
Gene ID	3055
Gene Symbol	HCK
Dilution range	WB 1:500 - 1:2000
Tissue Specificity	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
Purification	Affinity purification
Note	For Research Use Only (RUO).

Protein Name	Tyrosine-protein kinase HCK
Molecular Weight	59.6 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Storage Instruction	Store at -20C. Avoid freeze / thaw cycles.
Database Links	HGNC:4840OMIM:142370Reactome:R-HSA-164944
Alternative Names	Tyrosine-protein kinase 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 Localization	Lysosome, Membrane
Post-translational Modifications	Phosphorylated on several tyrosine residues, Autophosphorylated, Becomes rapidly phosphorylated upon activation of the immunoglobulin receptors FCGR1A and FCGR2A, Phosphorylation by the BCR-ABL fusion protein mediates activation of HCK, Phosphorylation at Tyr-411 increases kinase activity, Phosphorylation at Tyr-522 inhibits kinase activity, Kinase activity is not required for phosphorylation at Tyr-522, suggesting that this site is a target of other kinases,