

## Rabbit HCK Polyclonal Antibody | anti-HCK antibody

HCK Polyclonal Antibody

|                              |                       |                                        |                                                                               |
|------------------------------|-----------------------|----------------------------------------|-------------------------------------------------------------------------------|
| CATALOG #<br><b>AAA37005</b> | HOST<br><b>Rabbit</b> | REACTIVITY<br><b>Human, Mouse, Rat</b> | APPLICATIONS<br><b>Immunofluorescence, Immunohistochemistry, Western Blot</b> |
|------------------------------|-----------------------|----------------------------------------|-------------------------------------------------------------------------------|

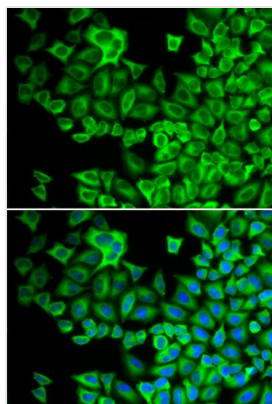
### PRODUCT SYNONYMS

HCK; Polyclonal Antibody; HCK Polyclonal Antibody; JTK9; anti-HCK antibody

### PRODUCT SPECIFICATIONS

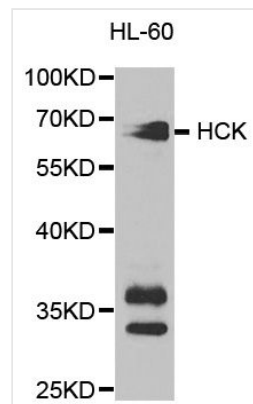
|                                               |                                                                                                                                                       |
|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                          | Rabbit                                                                                                                                                |
| Reactivity                                    | Human, Mouse, Rat                                                                                                                                     |
| Clonality                                     | Polyclonal                                                                                                                                            |
| Isotype                                       | IgG                                                                                                                                                   |
| Purity/Purification                           | Affinity Purification                                                                                                                                 |
| Concentration                                 | 1mg/ml (varies by lot)                                                                                                                                |
| Sequence Length                               | 526                                                                                                                                                   |
| Applicable Applications for anti-HCK antibody | IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)                                                                                |
| Species                                       | Human                                                                                                                                                 |
| Immunogen                                     | Recombinant Protein                                                                                                                                   |
| Immunogen                                     | Recombinant protein of human HCK                                                                                                                      |
| Calculated Molecular Weight                   | 57kDa                                                                                                                                                 |
| Preparation and Storage                       | Store at -20 degree C (regular) or -80 degree C (long term). Avoid freeze / thaw cycles.<br>Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3. |

### IMAGES



#### IF (Immunofluorescence)

Immunofluorescence analysis of A549 cells using HCK antibody. Blue: DAPI for nuclear staining.



#### WB (Western Blot)

Western blot analysis of extracts of HL-60 cells, using HCK antibody at 1:1000 dilution. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) at 1:10000 dilution. Lysates/proteins: 25ug per lane. Blocking buffer: 3% nonfat dry milk in TBST.

ADDITIONAL INFORMATION

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| Related Product Information for anti-HCK antibody | Hck (hemopoietic cell kinase) is a protein tyrosine kinase of the Src family prominently expressed in the lymphoid and myeloid lineages of hemopoiesis (1). It participates in transducing a variety of extracellular signals, which ultimately affect cellular processes including proliferation, differentiation and migration. The well-defined modular structure of Hck comprises a relatively divergent, NH2-terminal "unique" domain, which is subject to post-translational lipid modifications thereby targeting Hck to the plasma membrane. Src homology 3 (SH3) and 2 (SH2) domains, and a tyrosine kinase catalytic domain follow the "unique" domain. The catalytic activity of Hck is regulated, both positively and negatively, by tyrosine phosphorylation of highly conserved tyrosine (Y) residues. Phosphorylation of a single conserved Tyr499 residue in the COOH terminus of Hck by the protein kinase Csk renders Hck inactive as a result of an intramolecular interaction between the phosphorylated tyrosine (pY) residue and its own SH2 domain. Disruption of this interaction, either as a result of dephosphorylation, or substitution of the COOH-terminal regulatory Y residue with phenylalanine (F; e.g., HckY499F), or COOH-terminal truncation mutations as observed in the virally transduced v-Src oncoprotein, results in constitutive activation of Hck. In contrast to phosphorylation of the COOH-terminal regulatory tyrosine residue, autophosphorylation of a tyrosine residue (Tyr388) within the kinase domain of Hck acts to positively regulate its catalytic activity. Thus, activation of Hck requires both disruption of the COOH-terminal regulatory tyrosine-SH2 domain interaction and autophosphorylation of the regulatory tyrosine residue within the kinase domain (2, 3). The dysfunction or dysregulation of Hck may contribute to the pathogenesis of some human leukemias (4). |
| Product Categories/Family for anti-HCK antibody   | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

NCBI AND UNIPROT INFORMATION

|                                  |                                                                                                  |
|----------------------------------|--------------------------------------------------------------------------------------------------|
| NCBI GI #                        | 20141296                                                                                         |
| NCBI GeneID                      | 3055                                                                                             |
| UniProt Accession #              | P08631; Q29RX1; Q2VPE2; Q504R5; Q5T7K1; Q5T7K2; Q96CC0; Q9H5Y5; Q9NUA4; A8K1I1; B4DQB6; E1P5M2   |
| Molecular Weight                 | 526                                                                                              |
| NCBI Official Full Name          | Tyrosine-protein kinase HCK                                                                      |
| NCBI Official Synonym Full Names | HCK proto-oncogene, Src family tyrosine kinase                                                   |
| NCBI Official Symbol             | HCK                                                                                              |
| NCBI Official Synonym Symbols    | JTK9; p59Hck; p61Hck                                                                             |
| NCBI Protein Information         | tyrosine-protein kinase HCK; p59-HCK/p60-HCK; hemopoietic cell kinase; hematopoietic cell kinase |
| UniProt Protein Name             | Tyrosine-protein kinase HCK                                                                      |
| UniProt Gene Name                | HCK                                                                                              |
| UniProt Entry Name               | HCK_HUMAN                                                                                        |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.