# HCK Conjugated Antibody

Catalog No: #C32589

Package Size: #C32589-AF350 100ul #C32589-AF405 100ul #C32589-AF488 100ul #C32589-AF555 100ul #C32589-AF594 100ul #C32589-AF647 100ul #C32589-AF680 100ul #C32589-AF750 100ul #C32589-Biotin 100ul

Orders: order@signalwayantibody.com
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## Description

| | |
|---|---|
| Product Name | HCK Conjugated Antibody |
| Host Species | Rabbit |
| Clonality | Polyclonal |
| Species Reactivity | Hu Ms Rt |
| Specificity | The antibody detects endogenous level of total HCK protein. |
| Immunogen Description | Recombinant protein of human HCK. |
| Conjugates | Biotin AF350 AF405 AF488 AF555 AF594 AF647 AF680 AF750 |
| Other Names | JTK9 |
| Accession No. | Swiss-Prot#:P08631NCBI Gene ID:3055 |
| Uniprot | P08631 |
| GeneID | 3055; |
| Excitation Emission | AF350: 346nm/442nm<br>AF405: 401nm/421nm<br>AF488: 493nm/519nm<br>AF555: 555nm/565nm<br>AF594: 591nm/614nm<br>AF647: 651nm/667nm<br>AF680: 679nm/702nm<br>AF750: 749nm/775nm |
| Calculated MW | 57 |
| Formulation | 0.01M Sodium Phosphate, 0.25M NaCl, pH 7.6, 5mg/ml Bovine Serum Albumin, 0.02% Sodium Azide |
| Storage | Store at 4°C in dark for 6 months |

## Application Details

Suggested Dilution:

AF350 conjugated: most applications: 1: 50 - 1: 250

AF405 conjugated: most applications: 1: 50 - 1: 250

AF488 conjugated: most applications: 1: 50 - 1: 250

AF555 conjugated: most applications: 1: 50 - 1: 250

AF594 conjugated: most applications: 1: 50 - 1: 250

AF647 conjugated: most applications: 1: 50 - 1: 250

AF680 conjugated: most applications: 1: 50 - 1: 250

AF750 conjugated: most applications: 1: 50 - 1: 250

Biotin conjugated: working with enzyme-conjugated streptavidin, most applications: 1: 50 - 1: 1,000

## Product Description

Antibodies were purified by affinity purification using immunogen.

## Background

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).

Note: This product is for in vitro research use only