

CSK Antibody

Purified Mouse Monoclonal Antibody Catalog # A01469a

Specification

CSK Antibody - Product Information

Application WB, IF, FC Primary Accession P41240

Reactivity Human, Mouse, Rat, Monkey

Host Mouse
Clonality Monoclonal
Isotype IgG1
Calculated MW 50kDa KDa

Description

Carboxy-terminal Src kinase (Csk) is a ubiquitously expressed nonreceptor tyrosine kinase that negatively regulates the Src family kinases (SFK) by phosphorylation of the SFK carboxy-terminal tyrosine. Phosphorylated carboxy-terminal tyrosine binds to the SH2 domain of SFK intramolecularly and leads to folding and inactivation of the SFK . This Csk-catalyzed SFK tyrosine phosphorylation is highly specific and exclusive. The SFK carboxy-terminal tyrosine is the only known physiological substrate of Csk . Tissue specificity: Expressed in lung and macrophages.

Immunogen

Purified recombinant fragment of human CSK expressed in E. Coli.

Formulation

Ascitic fluid containing 0.03% sodium azide.

CSK Antibody - Additional Information

Gene ID 1445

Other Names

Tyrosine-protein kinase CSK, 2.7.10.2, C-Src kinase, Protein-tyrosine kinase CYL, CSK

Dilution

WB~~1/500 - 1/2000 IF~~1/200 - 1/1000 FC~~1/200 - 1/400

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

CSK Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

CSK Antibody - Protein Information



Name CSK

Function

Non-receptor tyrosine-protein kinase that plays an important role in the regulation of cell growth, differentiation, migration and immune response. Phosphorylates tyrosine residues located in the C-terminal tails of Src-family kinases (SFKs) including LCK, SRC, HCK, FYN, LYN, CSK or YES1. Upon tail phosphorylation, Src-family members engage in intramolecular interactions between the phosphotyrosine tail and the SH2 domain that result in an inactive conformation. To inhibit SFKs, CSK is recruited to the plasma membrane via binding to transmembrane proteins or adapter proteins located near the plasma membrane. Suppresses signaling by various surface receptors, including T-cell receptor (TCR) and B-cell receptor (BCR) by phosphorylating and maintaining inactive several positive effectors such as FYN or LCK.

Cellular Location

Cytoplasm. Cell membrane. Note=Mainly cytoplasmic, also present in lipid rafts

Tissue Location

Expressed in lung and macrophages.

CSK Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CSK Antibody - Images

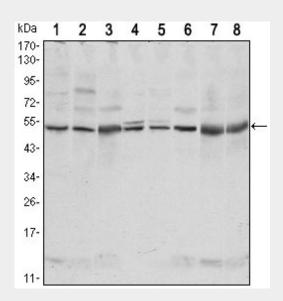


Figure 1: Western blot analysis using CSK mouse mAb against NIH/3T3 (1)☐Hela (2)☐COS7 (3), Jurkat (4), Raw246.7 (5), A549 (6), HL-60 (7) and PC-12 (8) cell lysate.



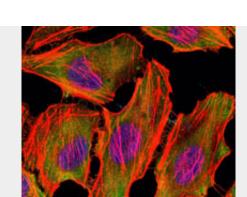


Figure 2: Immunofluorescence analysis of U251 cells using CSK mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

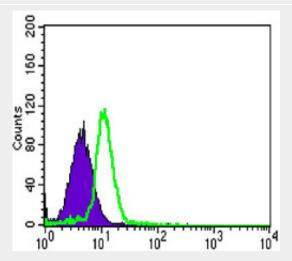


Figure 3: Flow cytometric analysis of HL-60 cells using CSK mouse mAb (green) and negative control (purple).

CSK Antibody - References

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1. Nat Genet. 2009 Jun;41(6):677-87. 2. Leuk Res. 2009 Sep;33(9):e168-9. 3. J Hypertens. 2011 Jan;29(1):62-9.