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CSK Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1469a

Product Information

Application	WB, FC, ICC, E
Primary Accession	P41240
Reactivity	Human, Mouse, Rat, Monkey
Host	Mouse
Clonality	Monoclonal
Clone Names	5F3
Isotype	IgG1
Calculated MW	50704
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.

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 FC~~1/200 - 1/400 ICC~~N/A E~~N/A
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.

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. May act as a negative regulator of EGFR and STAT3 signaling pathways (PubMed:26918609).
Cellular Location	Cytoplasm {ECO:0000250|UniProtKB:P41241}. Cell membrane {ECO:0000250|UniProtKB:P41241}. Note=Mainly cytoplasmic, also present in lipid rafts. {ECO:0000250|UniProtKB:P41241}
Tissue Location	Expressed in lung and macrophages.

References

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.

Images

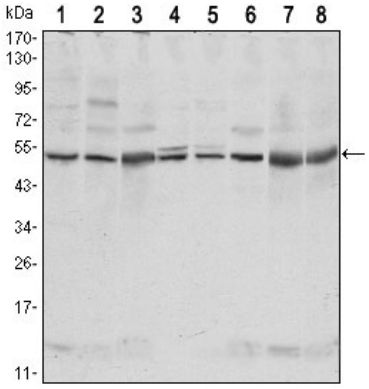


Figure 1: Western blot analysis using CSK mouse mAb against NIH/3T3 (1),Hela (2),COS7 (3), Jurkat (4), Raw246.7 (5), A549 (6), HL-60 (7) and PC-12 (8) cell lysate.

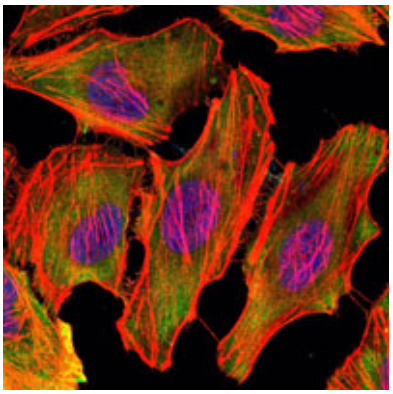
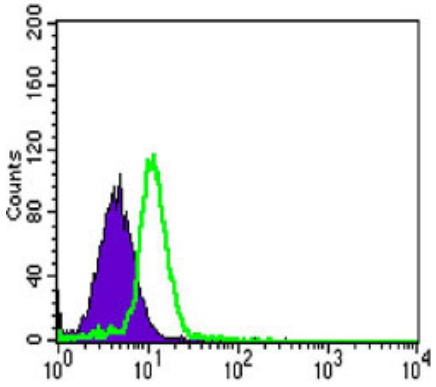


Figure 2: Immunofluorescence analysis of U251 cells using CSK mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

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



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