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MATK Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1321a

Product Information

Application	WB, FC, E
Primary Accession	P42679
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	9D7
Isotype	IgG1
Calculated MW	56469
Description	MATK (megakaryocyte-associated tyrosine kinase), also known as CTK, this protein has amino acid sequence similarity to Csk tyrosine kinase and has the structural features of the CSK subfamily: SRC homology SH2 and SH3 domains, a catalytic domain, a unique N terminus, lack of myristylation signals, lack of a negative regulatory phosphorylation site, and lack of an autophosphorylation site. This protein is thought to play a significant role in the signal transduction of hematopoietic cells. It is able to phosphorylate and inactivate Src family kinases, and may play an inhibitory role in the control of T-cell proliferation. This protein might be involved in signaling in some cases of breast cancer.
Immunogen	Purified recombinant fragment of human MATK expressed in E. Coli.
Formulation	Antibody are purified by protein G affinity chromatography. Liquid in PBS containing 50% glycerol and 0.03% sodium azide.

Additional Information

Gene ID	4145
Other Names	Megakaryocyte-associated tyrosine-protein kinase, 2.7.10.2, CSK homologous kinase, CHK, Hematopoietic consensus tyrosine-lacking kinase, Protein kinase HYL, Tyrosine-protein kinase CTK, MATK, CTK, HYL
Dilution	WB~~1/500 - 1/2000 FC~~1/200 - 1/400 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	MATK Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	MATK
Synonyms	CTK, HYL
Function	Could play a significant role in the signal transduction of hematopoietic cells. May regulate tyrosine kinase activity of SRC- family members in brain by specifically phosphorylating their C- terminal regulatory tyrosine residue which acts as a negative regulatory site. It may play an inhibitory role in the control of T- cell proliferation.
Cellular Location	Cytoplasm. Membrane. Note=In platelets, 90% of MATK localizes to the membrane fraction, and translocates to the cytoskeleton upon thrombin stimulation
Tissue Location	Expressed in various myeloid cell lines, detected in brain and lung

References

1. Int J Oncol. 2002 Jul;21(1):197-205. 2. Proc Natl Acad Sci U S A. 2002 Dec 24;99(26):16899-903. 3. Nat Genet. 2004 Jan;36(1):40-5.

Images

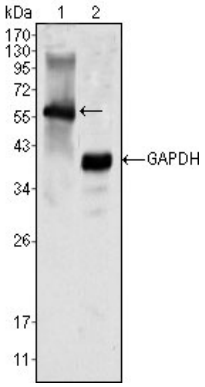

Figure 1: Western blot analysis using MATK mouse mAb against K562 cell lysate (1).

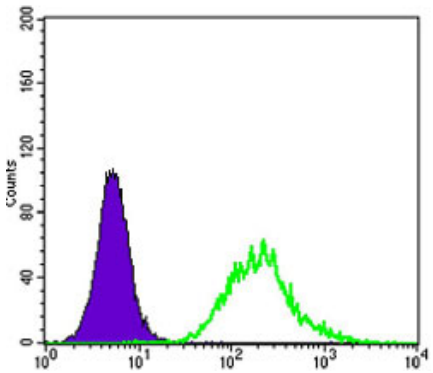

Figure 2: Flow cytometric analysis of K562 cells using MATK mouse mAb (green) and negative control (purple).