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RUNX1T1 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant RUNX1T1.
Catalog # AT3740a

Product Information

Application	WB, IF, E
Primary Accession	Q06455
Other Accession	NM_004349
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	5A12
Calculated MW	67566

Additional Information

Gene ID	862
Other Names	Protein CBFA2T1, Cyclin-D-related protein, Eight twenty one protein, Protein ETO, Protein MTG8, Zinc finger MYND domain-containing protein 2, RUNX1T1, AML1T1, CBFA2T1, CDR, ETO, MTG8, ZMYND2
Target/Specificity	RUNX1T1 (NP_004340, 416 a.a. ~ 525 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IF~~1:50~200 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	RUNX1T1 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

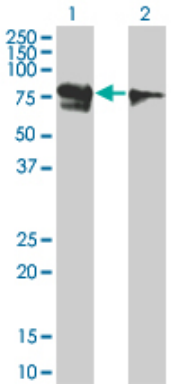
Background

The protein encoded by this gene is a putative zinc finger transcription factor and oncoprotein. In acute myeloid leukemia, especially in the M2 subtype, the t(8;21)(q22;q22) translocation is one of the most frequent karyotypic abnormalities. The translocation produces a chimeric gene made up of the 5'-region of the RUNX1 gene fused to the 3'-region of this gene. The chimeric protein is thought to associate with the nuclear corepressor/histone deacetylase complex to block hematopoietic differentiation. Several transcript variants encoding multiple isoforms have been found for this gene.

References

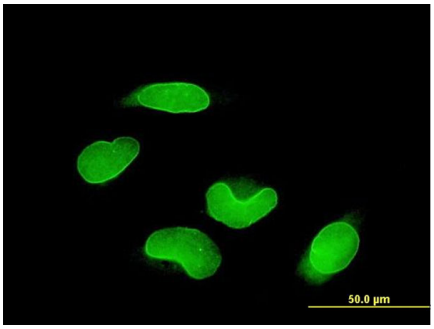
The leukemia associated ETO nuclear repressor gene is regulated by the GATA-1 transcription factor in erythroid/megakaryocytic cells. Ajore R, et al. BMC Mol Biol, 2010 May 20. PMID 20487545.Dimer-tetramer transition controls RUNX1/ETO leukemogenic activity. Wichmann C, et al. Blood, 2010 Jul 29. PMID 20430957.NHR4 domain mutations of ETO are probably very infrequent in AML1-ETO positive myeloid leukemia cells. Hackanson B, et al. Leukemia, 2010 Apr. PMID 20090777.AML1-ETO9a is correlated with C-KIT overexpression/mutations and indicates poor disease outcome in t(8;21) acute myeloid leukemia-M2. Jiao B, et al. Leukemia, 2009 Sep. PMID 19458628.RUNX1 and its fusion oncoprotein derivative, RUNX1-ETO, induce senescence-like growth arrest independently of replicative stress. Wolyniec K, et al. Oncogene, 2009 Jul 9. PMID 19448675.

Images

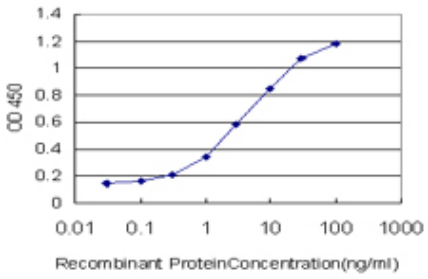


Western Blot analysis of RUNX1T1 expression in transfected 293T cell line by RUNX1T1 monoclonal antibody (M01), clone 5A12.

Lane 1: RUNX1T1 transfected lysate(67.566 KDa).
Lane 2: Non-transfected lysate.



Immunofluorescence of monoclonal antibody to RUNX1T1 on HeLa cell . [antibody concentration 10 ug/ml]



Detection limit for recombinant GST tagged RUNX1T1 is approximately 0.3ng/ml as a capture antibody.