

RUNX1T1 Antibody (monoclonal) (M01)

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

Specification

RUNX1T1 Antibody (monoclonal) (M01) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW IF, WB, E <u>Q06455</u> <u>NM_004349</u> Human mouse Monoclonal IgG2a Kappa 67566

RUNX1T1 Antibody (monoclonal) (M01) - 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

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.

RUNX1T1 Antibody (monoclonal) (M01) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides



- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

RUNX1T1 Antibody (monoclonal) (M01) - Images



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



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.





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

RUNX1T1 Antibody (monoclonal) (M01) - 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.

RUNX1T1 Antibody (monoclonal) (M01) - 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.