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MLLT1 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6188a

Product Information

Application	WB, E
Primary Accession	Q03111
Other Accession	NP_005925
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	62056
Antigen Region	523-552

Additional Information

Gene ID	4298
Other Names	Protein ENL, YEATS domain-containing protein 1, MLLT1, ENL, LTG19, YEATS1
Target/Specificity	This MLLT1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 523-552 amino acids from the C-terminal region of human MLLT1.
Dilution	WB~~1:2000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	MLLT1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	MLLT1
Synonyms	ENL, LTG19, YEATS1
Function	Chromatin reader component of the super elongation complex (SEC), a complex required to increase the catalytic rate of RNA polymerase II transcription by suppressing transient pausing by the polymerase at multiple

sites along the DNA (PubMed:20159561, PubMed:20471948). Specifically recognizes and binds acetylated and crotonylated histones, with a preference for histones that are crotonylated (PubMed:27105114). Has a slightly higher affinity for binding histone H3 crotonylated at 'Lys-27' (H3K27cr) than 'Lys-20' (H3K9cr20) (PubMed:27105114).

Cellular Location Nucleus.

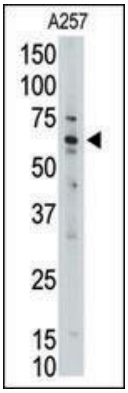
Background

Chromosome band 11q23 is the site of translocations in myeloid and lymphoid acute leukemias, pediatric leukemias, and treatment-induced secondary acute myelogenous leukemia. The translocation breakpoints cluster in a restricted region of the HRX gene resulting in chimeric genes that encode an N-terminal portion of Hrx fused to various partner proteins. Myeloid/lymphoid or mixed-lineage leukemia translocated to 1 (MLLT1) is a nuclear protein with transcriptional transactivation properties that is fused to Hrx in t(11;19) leukemias. The minimal MLLT1 sequence required for transcription activation was narrowed to the C-terminal 90 amino acids.

References

Nie, Z., et al., Mol. Cell. Biol. 23(8):2942-2952 (2003).
Lavau, C., et al., Proc. Natl. Acad. Sci. U.S.A. 97(20):10984-10989 (2000).
Thirman, M.J., et al., Proc. Natl. Acad. Sci. U.S.A. 91(25):12110-12114 (1994).
Rubnitz, J.E., et al., Blood 84(6):1747-1752 (1994).
Yamamoto, K., et al., Oncogene 8(10):2617-2625 (1993).

Images



Western blot analysis of anti-MLLT1 Pab (Cat. #AP6188a) in A257 cell line lysate (35ug/lane). MLLT1(arrow) was detected using the purified Pab.

Citations

- The mixed-lineage leukemia fusion partner AF4 stimulates RNA polymerase II transcriptional elongation and mediates coordinated chromatin remodeling.