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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 (HGNC:7134)
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). May play a role in leukemogenic gene transcription (PubMed:39794553).

Cellular Location Nucleus.

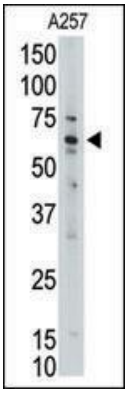
Background

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.