

MLL (phospho S516) polyclonal antibody

Catalog # PAB15909 Size 100 ug

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic phosphopeptide of MLL.
Immunogen	Synthetic phosphopeptide corresponding to residues surrounding S516 of human MLL.
Host	Rabbit
Reactivity	Human
Form	Liquid
Recommend Usage	ELISA (1:2000-1:5000) Western Blot (1 ug/mL) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, pH 7.2 (50% glycerol, 0.01% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot
- Enzyme-linked Immunoabsorbent Assay

Gene Info — MLL

Entrez GeneID	4297
Gene Name	MLL

Gene Alias	ALL-1, CXXC7, FLJ11783, HRX, HTRX1, KMT2A, MLL/GAS7, MLL1A, TET1-MLL, TRX1
Gene Description	myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila)
Omim ID	159555
Gene Ontology	Hyperlink
Gene Summary	The MLL gene encodes a DNA-binding protein that methylates histone H3 (see MIM 601128) lys4 (H3K4) and positively regulates expression of target genes, including multiple HOX genes (see MIM 142980). MLL is a frequent target for recurrent translocations in acute leukemias that may be characterized as acute myeloid leukemia (AML; MIM 601626), acute lymphoblastic leukemia (ALL), or mixed lineage (biphenotypic) leukemia (MLL). Leukemias with translocations involving MLL possess unique clinical and biologic characteristics and are often associated with poor prognosis. MLL rearrangements are found in more than 70% of infant leukemias, whether the immunophenotype is more consistent with ALL or AML6, but are less frequent in leukemias from older children. MLL translocations are also found in approximately 10% of AMLs in adults, as well as in therapy-related leukemias, most often characterized as AML, that develop in patients previously treated with topoisomerase II inhibitors for other malignancies. More than 50 different MLL fusion partners have been identified. Leukemogenic MLL translocations encode MLL fusion proteins that have lost H3K4 methyltransferase activity. A key feature of MLL fusion proteins is their ability to efficiently transform hematopoietic cells into leukemia stem cells (Krivtsov and Armstrong, 2007 [PubMed 17957188]).[supplied by OMIM]
Other Designations	CDK6/MLL fusion protein MLL-AF4 der(11) fusion protein MLL/GAS7 fusion protein MLL/GMPS fusion protein trithorax-like protein zinc finger protein HRX

Publication Reference

- [Chromatin-remodeling factor BAZ1A/ACF1 targets UV damage sites in an MLL1-dependent manner to facilitate nucleotide excision repair.](#)

Takafumi Koyauchi, Hiroyuki Niida, Akira Motegi, Satoshi Sakai, Chiharu Uchida, Tatsuya Ohhata, Kenta Iijima, Akihiko Yokoyama, Takafumi Suda, Masatoshi Kitagawa.

Biochimica et Biophysica Acta. Molecular Cell Research 2022 Nov; 1869(11):119332.

Application: IF, WB-Tr, Human, HeLa cells

- [Exon/intron structure of the human ALL-1 \(MLL\) gene involved in translocations to chromosomal region 11q23 and acute leukaemias.](#)

Nilson I, Lochner K, Siegler G, Greil J, Beck JD, Fey GH, Marschalek R.

British Journal of Haematology 1996 Jun; 93(4):966.

Application: IHC, WB-Ce, WB-Tr, Human, Human acute leukaemias, Mammalian cells

- [The human MLL gene: nucleotide sequence, homology to the Drosophila trx zinc-finger domain, and alternative splicing.](#)

D Mbangkollo, R Burnett, N McCabe, M Thirman, H Gill, H Yu, J D Rowley, M O Diaz.

DNA and Cell Biology 1995 Jun; 14(6):475.

- [Sequence analysis of the breakpoint cluster region in the ALL-1 gene involved in acute leukemia.](#)

Gu Y, Alder H, Nakamura T, Schichman SA, Prasad R, Canaani O, Saito H, Croce CM, Canaani E.

Cancer Research 1994 May; 54(9):2327.

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