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MLL5 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP14173a

Specification

MLL5 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession Q8IZD2

MLL5 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 55904

Other Names
Histone-lysine N-methyltransferase 2E, Lysine N-methyltransferase 2E, Myeloid/lymphoid or mixed-lineage leukemia protein 5, KMT2E, MLL5

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

MLL5 Antibody (N-term) Blocking Peptide - Protein Information

Name KMT2E

Synonyms MLL5

Function
Associates with chromatin regions downstream of transcriptional start sites of active genes and thus regulates gene transcription (PubMed:23629655, PubMed:24130829, PubMed:23798402). Chromatin interaction is mediated via the binding to tri-methylated histone H3 at 'Lys-4' (H3K4me3) (PubMed:24130829, PubMed:23798402). Key regulator of hematopoiesis involved in terminal myeloid differentiation and in the regulation of hematopoietic stem cell (HSCs) self-renewal by a mechanism that involves DNA methylation (By similarity). Also acts as an important cell cycle regulator, participating in cell cycle regulatory network machinery at multiple cell cycle stages including G1/S transition, S phase progression and mitotic entry (PubMed:14718661, PubMed:18573682, PubMed:<a href="http://www.uniprot.org/citations/19264965"

target="_blank">19264965, PubMed:23629655). Recruited to E2F1 responsive promoters by HCFC1 where it stimulates tri-methylation of histone H3 at 'Lys-4' and transcriptional activation and thereby facilitates G1 to S phase transition (PubMed:23629655). During myoblast differentiation, required to suppress inappropriate expression of S-phase-promoting genes and maintain expression of determination genes in quiescent cells (By similarity).

Cellular Location
Chromosome. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Nucleus speckle. Note=Absent from the nucleolus (PubMed:14718661). Localizes to chromosome during interphase and to centrosomes during mitosis (PubMed:23798402). Dissociation from mitotic chromosome is likely due to histone H3 phosphorylation on 'Thr-3' and 'Thr-6' (PubMed:23798402). [Isoform NKp44L]: Cytoplasm. Cell membrane; Peripheral membrane protein

Tissue Location
Widely expressed in both adult and fetal tissues (PubMed:12101424, PubMed:23958951). Highest levels of expression observed in fetal thymus and kidney and in adult hematopoietic tissues, jejunum and cerebellum (PubMed:12101424, PubMed:23958951). Isoform NKp44L: Not detected on circulating cells from healthy individuals, but is expressed on a large panel of tumor and transformed cells (PubMed:23958951).

MLL5 Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides

MLL5 Antibody (N-term) Blocking Peptide - Images

MLL5 Antibody (N-term) Blocking Peptide - Background

This gene is a member of the myeloid/lymphoid ormixed-lineage leukemia (MLL) family and encodes a protein with anN-terminal PHD zinc finger and a central SET domain. Overexpressionof the protein inhibits cell cycle progression. Alternatetranscriptional splice variants have been characterized. [providedby RefSeq].

MLL5 Antibody (N-term) Blocking Peptide - References

Liu, J., et al. J. Biol. Chem. 285(27):20904-20914(2010)Fujiki, R., et al. Nature 459(7245):455-459(2009)Cheng, F., et al. Int. J. Biochem. Cell Biol. 40(11):2472-2481(2008)Sun, X.J., et al. PLoS ONE 3 (1), E1499 (2008) :Olsen, J.V., et al. Cell 127(3):635-648(2006)