10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

MLL3 Blocking Peptide (C-term)

Synthetic peptide
Catalog # BP22080b

Specification

MLL3 Blocking Peptide (C-term) - Product Information

Primary Accession Q8NEZ4

MLL3 Blocking Peptide (C-term) - Additional Information

Gene ID 58508

Other Names
Histone-lysine N-methyltransferase 2C, Lysine N-methyltransferase 2C, 2.1.1.43, Homologous to ALR protein, Myeloid/lymphoid or mixed-lineage leukemia protein 3, KMT2C, HALR, KIAA1506, MLL3

Target/Specificity
The synthetic peptide sequence is selected from aa 3804-3818 of HUMAN KMT2C

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.

MLL3 Blocking Peptide (C-term) - Protein Information

Name KMT2C

Synonyms HALR, KIAA1506, MLL3

Function
Histone methyltransferase that catalyzes methyl group transfer from S-adenosyl-L-methionine to the epsilon-amino group of 'Lys-4' of histone H3 (H3K4) (PubMed:25561738). Part of chromatin remodeling machinery predominantly forms H3K4me1 methylation marks at active chromatin sites where transcription and DNA repair take place (PubMed:22266653, PubMed:24081332, PubMed:25561738). Likely plays a redundant role with KMT2D in enriching H3K4me1 mark on primed and active enhancer elements (PubMed:24081332).

Cellular Location
Nucleus.

Tissue Location
Highly expressed in testis and ovary, followed by brain and liver. Also expressed in placenta, peripherical blood, fetal thymus, heart, lung and kidney. Within brain, expression was highest in hippocampus, caudate nucleus, and substantia nigra. Not detected in skeletal muscle and fetal liver

MLL3 Blocking Peptide (C-term) - Protocols

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

- Blocking Peptides

MLL3 Blocking Peptide (C-term) - Images

MLL3 Blocking Peptide (C-term) - Background

Histone methyltransferase. Methylates 'Lys-4' of histone H3. H3 'Lys-4' methylation represents a specific tag for epigenetic transcriptional activation. Central component of the MLL2/3 complex, a coactivator complex of nuclear receptors, involved in transcriptional coactivation. KMT2C/MLL3 may be a catalytic subunit of this complex. May be involved in leukemogenesis and developmental disorder.

MLL3 Blocking Peptide (C-term) - References

Ruault M.,et al.Gene 284:73-81(2002).
Tan Y.C.,et al.Cancer Detect. Prev. 25:454-469(2001).
Hillier L.W.,et al.Nature 424:157-164(2003).
Nagase T.,et al.DNA Res. 7:143-150(2000).
Nakajima D.,et al.DNA Res. 9:99-106(2002).