

**KDM1B Blocking Peptide (N-term)**

Synthetic peptide

Catalog # BP21020a

**Specification**

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**KDM1B Blocking Peptide (N-term) - Product Information**

Primary Accession

[Q8NB78](#)**KDM1B Blocking Peptide (N-term) - Additional Information**

Gene ID 221656

**Other Names**

Lysine-specific histone demethylase 1B, 1---, Flavin-containing amine oxidase domain-containing protein 1, Lysine-specific histone demethylase 2, KDM1B, AOF1, C6orf193, LSD2

**Target/Specificity**

The synthetic peptide sequence is selected from aa 38-53 of HUMAN KDM1B

**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.

**KDM1B Blocking Peptide (N-term) - Protein Information**Name KDM1B ([HGNC:21577](#))**Function**

Histone demethylase that demethylates 'Lys-4' of histone H3, a specific tag for epigenetic transcriptional activation, thereby acting as a corepressor. Required for de novo DNA methylation of a subset of imprinted genes during oogenesis. Acts by oxidizing the substrate by FAD to generate the corresponding imine that is subsequently hydrolyzed. Demethylates both mono- and di-methylated 'Lys-4' of histone H3. Has no effect on tri-methylated 'Lys-4', mono-, di- or tri-methylated 'Lys-9', mono-, di- or tri-methylated 'Lys-27', mono-, di- or tri-methylated 'Lys-36' of histone H3, or on mono-, di- or tri-methylated 'Lys-20' of histone H4. Alone, it is unable to demethylate H3K4me on nucleosomes and requires the presence of GLYR1 to achieve such activity, they form a multifunctional enzyme complex that modifies transcribed chromatin and facilitates Pol II transcription through nucleosomes (PubMed:<a href="http://www.uniprot.org/citations/30970244" target="\_blank">30970244</a>).

**Cellular Location**

Nucleus. Chromosome. Note=Found in actively RNAPolIII- transcribed gene bodies.

## **KDM1B Blocking Peptide (N-term) - Protocols**

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

- [Blocking Peptides](#)

## **KDM1B Blocking Peptide (N-term) - Images**

## **KDM1B Blocking Peptide (N-term) - Background**

Histone demethylase that demethylates 'Lys-4' of histone H3, a specific tag for epigenetic transcriptional activation, thereby acting as a corepressor. Required for de novo DNA methylation of a subset of imprinted genes during oogenesis. Acts by oxidizing the substrate by FAD to generate the corresponding imine that is subsequently hydrolyzed. Demethylates both mono- and di-methylated 'Lys-4' of histone H3. Has no effect on tri- methylated 'Lys-4', mono-, di- or tri-methylated 'Lys-9', mono-, di- or tri-methylated 'Lys-27', mono-, di- or tri-methylated 'Lys- 36' of histone H3, or on mono-, di- or tri-methylated 'Lys-20' of histone H4 (By similarity).

## **KDM1B Blocking Peptide (N-term) - References**

Ota T.,et al.Nat. Genet. 36:40-45(2004).  
Mungall A.J.,et al.Nature 425:805-811(2003).  
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.  
Bechtel S.,et al.BMC Genomics 8:399-399(2007).  
Cantin G.T.,et al.J. Proteome Res. 7:1346-1351(2008).