

# JHDM1a/FBXL11 Blocking Peptide (C-term)

Synthetic peptide Catalog # BP1043b

## Specification

# JHDM1a/FBXL11 Blocking Peptide (C-term) - Product Information

Primary Accession Other Accession <u>Q9Y2K7</u> <u>P59997</u>

# JHDM1a/FBXL11 Blocking Peptide (C-term) - Additional Information

Gene ID 22992

**Other Names** 

Lysine-specific demethylase 2A, CXXC-type zinc finger protein 8, F-box and leucine-rich repeat protein 11, F-box protein FBL7, F-box protein Lilina, F-box/LRR-repeat protein 11, JmjC domain-containing histone demethylation protein 1A, [Histone-H3]-lysine-36 demethylase 1A, KDM2A, CXXC8, FBL7, FBXL11, JHDM1A, KIAA1004

Target/Specificity

The synthetic peptide sequence is selected from aa 882-896 of HUMAN KDM2A

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.

#### JHDM1a/FBXL11 Blocking Peptide (C-term) - Protein Information

#### Name KDM2A

#### Function

Histone demethylase that specifically demethylates 'Lys-36' of histone H3, thereby playing a central role in histone code. Preferentially demethylates dimethylated H3 'Lys-36' residue while it has weak or no activity for mono- and tri-methylated H3 'Lys-36'. May also recognize and bind to some phosphorylated proteins and promote their ubiquitination and degradation. Required to maintain the heterochromatic state. Associates with centromeres and represses transcription of small non-coding RNAs that are encoded by the clusters of satellite repeats at the centromere. Required to sustain centromeric integrity and genomic stability, particularly during mitosis. Regulates circadian gene expression by repressing the transcriptional activator activity of CLOCK-BMAL1 heterodimer and RORA in a catalytically- independent manner (PubMed:<a href="http://www.uniprot.org/citations/26037310" target="\_blank">>26037310</a>).



### **Cellular Location**

Nucleus, nucleoplasm. Chromosome Note=Punctate expression throughout the nucleoplasm and enriched in the perinucleolar region (PubMed:19001877, PubMed:20417597). Specifically nucleates at CpG islands where it's presence results in chromatin depleted in H3K36me2 (PubMed:19001877, PubMed:20417597)

**Tissue Location** Widely expressed, with highest levels in brain, testis and ovary, followed by lung.

### JHDM1a/FBXL11 Blocking Peptide (C-term) - Protocols

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

<u>Blocking Peptides</u>

#### JHDM1a/FBXL11 Blocking Peptide (C-term) - Images

#### JHDM1a/FBXL11 Blocking Peptide (C-term) - Background

JHDM1a/FBXL11 is a member of the F-box protein family which is characterized by an approximately 40 amino acid motif, the F-box. The F-box proteins constitute one of the four subunits of ubiquitin protein ligase complex called SCFs (SKP1-cullin-F-box), which function in phosphorylation-dependent ubiquitination. The F-box proteins are divided into 3 classes: Fbws containing WD-40 domains, Fbls containing leucine-rich repeats, and Fbxs containing either different protein-protein interaction modules or no recognizable motifs. JHDM1a/FBXL11 belongs to the Fbls class and, in addition to an F-box, contains at least 6 highly degenerated leucine-rich repeats.

#### JHDM1a/FBXL11 Blocking Peptide (C-term) - References

Tsukada,Y.,Nature 439 (7078), 811-816 (2006) Andersen,J.S.,Nature 433 (7021), 77-83 (2005)