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JMJD7 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP9020b

Specification

JMJD7 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession P0C870

JMJD7 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 100137047

Other Names
JmjC domain-containing protein 7, Jumonji domain-containing protein 7, JMJD7

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP9020b was selected from the C-term region of human JMJD7. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

JMJD7 Antibody (C-term) Blocking Peptide - Protein Information

Name JMJD7 {ECO:0000303|PubMed:28847961, ECO:0000312|HGNC:HGNC:34397}

Function
Bifunctional enzyme that acts both as an endopeptidase and 2- oxoglutarate-dependent monooxygenase (PubMed:28847961, PubMed:29915238). Endopeptidase that cleaves histones N-terminal tails at the carboxyl side of methylated arginine or lysine residues, to generate 'tailless nucleosomes', which may trigger transcription elongation (PubMed:28847961). Preferentially recognizes and cleaves monomethylated and dimethylated arginine residues of histones H2, H3 and H4 (PubMed:28847961). After initial cleavage, continues to digest histones tails via its aminopeptidase activity (PubMed:28847961). Additionally, may play a role in protein biosynthesis by

modifying the translation machinery (PubMed:29915238). Acts as a Fe(2+) and 2- oxoglutarate-dependent monooxygenase, catalyzing (S)-stereospecific hydroxylation at C-3 of 'Lys-22' of DRG1 and 'Lys-21' of DRG2 translation factors (TRAFAC), promoting their interaction with ribonucleic acids (RNA) (PubMed:29915238).

Cellular Location
Nucleus. Cytoplasm

JMJD7 Antibody (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

JMJD7 Antibody (C-term) Blocking Peptide - Images

JMJD7 Antibody (C-term) Blocking Peptide - Background

JMJD7 is a highly conserved protein with a JmjC domain, which are part of the cupin metalloenzyme superfamily. JmjC proteins may function as 2-oxoglutarate-Fe(II)-dependent dioxygenases. Most tissues also express read-through

JMJD7 Antibody (C-term) Blocking Peptide - References

Song,C., et.al., J. Biol. Chem. 274 (24), 17063-17067 (1999)