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JARID1A Blocking Peptide (C-term)

Synthetic peptide
Catalog # BP1019b

Specification

JARID1A Blocking Peptide (C-term) - Product Information

Primary Accession P29375

JARID1A Blocking Peptide (C-term) - Additional Information

Gene ID 5927

Other Names
Lysine-specific demethylase 5A, 11411-, Histone demethylase JARID1A, Jumonji/ARID domain-containing protein 1A, Retinoblastoma-binding protein 2, RBBP-2, KDM5A, JARID1A, RBBP2, RBP2

Target/Specificity
The synthetic peptide sequence is selected from aa 1624~1641 of HUMAN KDM5A

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.

JARID1A Blocking Peptide (C-term) - Protein Information

Name KDM5A (HGNC:9886)

Function
Histone demethylase that specifically demethylates 'Lys-4' of histone H3, thereby playing a central role in histone code. Does

JARID1A Blocking Peptide (C-term) - Background

The protein encoded by this gene is a ubiquitously expressed nuclear protein. It binds directly, with several other proteins, to retinoblastoma protein which regulates cell proliferation. This protein also interacts with rhombotin-2 which functions distinctly in erythropoiesis and in T-cell leukemogenesis. Rhombotin-2 is thought to either directly affect the activity of the encoded protein or may indirectly modulate the functions of the retinoblastoma protein by binding to this protein.

JARID1A Blocking Peptide (C-term) - References

Mao, S., et al., Oncogene 14(13):1531-1539 (1997).
Baens, M., et al., Genomics 29(1):44-52 (1995).
Fattaey, A.R., et al., Oncogene 8(11):3149-3156 (1993).
Defeo-Jones, D., et al., Nature 352(6332):251-254 (1991).

not demethylate histone H3 'Lys-9', H3 'Lys-27', H3 'Lys-36', H3 'Lys-79' or H4 'Lys-20'. Demethylates trimethylated and dimethylated but not monomethylated H3 'Lys-4'. Regulates specific gene transcription through DNA-binding on 5'-CCGCCC-3' motif (PubMed:18270511). May stimulate transcription mediated by nuclear receptors. Involved in transcriptional regulation of Hox proteins during cell differentiation (PubMed:19430464). May participate in transcriptional repression of cytokines such as CXCL12. Plays a role in the regulation of the circadian rhythm and in maintaining the normal periodicity of the circadian clock. In a histone demethylase-independent manner, acts as a coactivator of the CLOCK-ARNTL/BMAL1-mediated transcriptional activation of PER1/2 and other clock-controlled genes and increases histone acetylation at PER1/2 promoters by inhibiting the activity of HDAC1 (By similarity). Seems to act as a transcriptional corepressor for some genes such as MT1F and to favor the proliferation of cancer cells (PubMed:27427228).

Cellular Location
Nucleus, nucleolus. Nucleus {ECO:0000250|UniProtKB:Q3UXZ9} Note=Occupies promoters of genes involved in RNA metabolism and mitochondrial function. {ECO:0000250|UniProtKB:Q3UXZ9}

JARID1A Blocking Peptide (C-term) - Protocols

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

- Blocking Peptides