

PRODUCT INFORMATION



Histone H3 Trimethyl Lys9 Peptide

Item No. 10530

Synonym: H3K9me3 Peptide
Peptide Sequence: Human histone H3 amino acids 2-16; ARTKQTARK(Me)₃-STGGKA
FW: 1,601.0
Storage: -20°C
Stability: ≥1 year at -20°C as supplied; or prepare a 1 mg/ml (625 µM) stock solution with water and freeze at -20° C for use within 6 months
Supplied as: A lyophilized peptide
Solubility: 20 mg/ml in water or aqueous buffers

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Description

Histone H3 undergoes many modifications including acetylation, methylation, and phosphorylation that are important for regulation of gene transcription.¹ This histone H3 peptide contains a trimethylated lysine residue at position nine which is a substrate for several of the JmjC domain-containing class of histone demethylases. JMJD2A and JMJD2D exhibit higher affinity with H3K9me3 compared to H3K9me2.²

References

1. Bhaumik, S.R., Smith, E., and Shilatifard, A. Covalent modifications of histones during development and disease pathogenesis. *Nat. Struct. Mol. Biol.* **14(11)**, 1008-1016 (2007).
2. Couture, J.-F., Collazo, E., Ortiz-Tello, P.A., et al. Specificity and mechanism of JMJD2A, a trimethyllysine-specific histone demethylase. *Nat. Struct. Mol. Biol.* **14(8)**, 689-695 (2007).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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