PRODUCT INFORMATION

Histone H3K36Me2 (21-44)-GK-biotin (trifluoroacetate salt)

Item No. 27531

Formal Name: L-alanyl-L-threonyl-L-lysyl-L-alanyl-L-alanyl-L-arginyl-L-lysyl-L-seryl-L-alanyl-L-prolyl-L-alanyl-L-threonylglycylglycyl-L-valyl-N^6,N^6-dimethyl-L-lysyl-L-lysyl-L-prolyl-L-histidyl-L-arginyl-L-tyrosyl-L-arginyl-L-prolylglycylglycyl-L-lysine-biotin, trifluoroacetate salt

Synonyms: ATKAARKSAPATGGV-K(Me2)-KPHRYRPG-GK(Biotin), [Lys(Me2)36]-Histone H3 (21-44)-GK(Biotin), Histone H3 (21-44) (Lys^{36}me2)-biotin

MF: $C_{129}H_{218}N_{44}O_{33}S \bullet XCF_3COOH$

FW: 2,945.5

Purity: ≥95%

Supplied as: A solid

Storage: -20°C

Stability: ≥4 years

H—Ala—Thr—Lys—Ala—Ala—Arg—Lys—Ser—Ala—Pro—
Ala—Thr—Gly—Gly—Val—Lys(Me2)—Lys—Pro—His—Arg—
Tyr—Arg—Pro—Gly—Gly—Lys(Biotin)—OH
• XCF_3COOH

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

Laboratory Procedures

Histone H3K36Me2 (21-44)-GK-biotin (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the histone H3K36Me2 (21-44)-GK-biotin (trifluoroacetate salt) in water. The solubility of histone H3K36Me2 (21-44)-GK-biotin (trifluoroacetate salt) in water is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Histone H3K36Me2 (21-44) is a peptide fragment of histone H3 that corresponds to amino acid residues 22-45 of the human histone H3.1 and H3.2 sequences. It is dimethylated at lysine 36 and biotinylated *via* a C-terminal GK linker. Dimethylation of H3K36 is enriched at coding regions of genes and correlates with the initiation, but not maintenance, of active transcription.[1,2]

References

1. Li, B., Jackson, J., Simon, M.D., *et al.* Histone H3 lysine 36 dimethylation (H3K36me2) is sufficient to recruit the Rpd3s histone deacetylase complex and to repress spurious transcription. *J. Biol. Chem.* **284(12)**, 7970-7976 (2009).
2. Rao, B., Shibata, Y., Strahl, B.D., *et al.* Dimethylation of histone H3 at lysine 36 demarcates regulatory and nonregulatory chromatin genome-wide. *Mol. Cell. Biol.* **25(21)**, 9447-9459 (2005).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM