PRODUCT INFORMATION



H-Ala-Thr-Lys-Ala-Ala-Arg-Lys-Ser-Ala-Pro-

Ala-Thr-Gly-Gly-Val-Lys-Lys-Pro-His-Arg-

Tyr-Arg-Pro-Gly-Gly-Lys(Biotin)-OH

• XCF₃COOH

Histone H3 (21-44)-GK-biotin (trifluoroacetate salt)

Item No. 27761

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-L-lysyl-L-lysyl-L-prolyl-L-histidyl-L-arginyl-L-tyrosyl-L-arginyl-L-

proylglycylglycyl-L-lysine biotin, trifluoroacetate salt ATKAARKSAPATGGVKKPHRYRPG-GK(Biotin)

Synonym: MF: C₁₂₇H₂₁₄N₄₄O₃₃S • XCF₃COOH

FW: 2,917.4 **Purity:** ≥95% Supplied as: A solid -20°C Storage:

Stability: ≥4 years

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

Laboratory Procedures

Histone H3 (21-44)-GK-biotin (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the histone H3 (21-44)-GK-biotin (trifluoroacetate salt) in water. The solubility of histone H3 (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 H3 (21-44)-GK-biotin is a peptide fragment of histone H3 that corresponds to amino acid residues 22-45 of the human histone H3.1 and 3.2 sequences and is biotinylated via a C-terminal GK linker. Histone H3 (21-44) contains a lysine residue at position 23 that is subject to acetylation, an arginine at position 26 subject to methylation, and a serine at position 28 subject to phosphorylation, as well as lysine residues at positions 27 and 36 that are subject to methylation and acetylation. Histone H3 (21-44)-GK-biotin has been used as a substrate for the primate-specific histone methyltransferase PR domain-containing protein 7 (PRDM7) to determine substrate specificity.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. Blazer, L.L., Lima-Fernandes, E., Gibson, E., et al. PR domain-containing protein 7 (PRDM7) is a histone 3 lysine 4 trimethyltransferase. J. Biol. Chem. 291(26), 13509-13519 (2016).

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

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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