PRODUCT INFORMATION



Histone H3 (5-23) (yeast) (trifluoroacetate salt)

Item No. 27528

Formal Name:	L-glutaminyl-L-threonyl-L-alanyl-L-arginyl-	
	L-lysyl-L-seryl-L-threonylglycylglycyl-L-	
	lysyl-L-alanyl-L-prolyl-L-arginyl-L-lysyl-L-	
	glutaminyl-L-leucine-L-alanyl-L-seryl-L-lysyl,	
	trifluoroacetate salt	H-GIn-Thr-Ala-Arg-Lys-Ser-Thr-Gly-Gly-Lys-
Synonyms:	H3p19, QTARKSTGGKAPRKQLASK	Ala—Pro—Arg—Lys—Gln—Leu—Ala—Ser—Lys—OH
MF:	C ₈₄ H ₁₅₃ N ₃₁ O ₂₆ • XCF ₃ COOH	
FW:	2,013.3	• XCF ₃ COOH
Purity:	≥95%	
Supplied as:	A solid	
Storage:	-20°C	
Stability:	≥4 years	
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.		

Laboratory Procedures

Histone H3 (5-23) (yeast) (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the histone H3 (5-23) (yeast) (trifluoroacetate salt) in water. The solubility of histone H3 (5-23) (yeast) (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 (5-23) is a peptide fragment of histone H3 that corresponds to amino acid residues 6-24 of S. cerevisiae histone H3 (Hht1). The yeast histone H3 (5-23) sequence is similar to the human histone H3 (5-23) sequence but contains one amino acid substitution at residue 18 of the peptide. Histone H3 can be acetylated at lysine 14.¹ Histone H3 (5-23) has been used as a substrate to measure the activity of various histone acetyltransferases in vitro, including wild-type and mutant versions of yeast ESA1 and Tetrahymena tGCN5, as well as the recombinant MYST domain of human monocytic leukemia zinc finger protein (MOZ).¹⁻³

References

- 1. Holbert, M.A., Sikorski, T., Carten, J., et al. The human monocytic leukemia zinc finger histone acetyltransferase domain contains DNA-binding activity implicated in chromatin targeting. J. Biol. Chem. 282(50), 36603-36613 (2007).
- 2. Yan, Y., Harper, S., Speicher, D.W., et al. The catalytic mechanism of the ESA1 histone acetyltransferase involves a self-acetylated intermediate. Nat. Struct. Biol. 9(11), 862-869 (2002).
- 3. Mehta, K.R., Chan, Y.M., Lee, M.X., et al. Mutagenesis of tGCN5 core region reveals two critical surface residues F90 and R140. Biochem. Bioph. Res. Commun. 400(3), 363-368 (2010).

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

SAFFTY 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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