

PRODUCT INFORMATION

Histone H3K79Me1 (69-89) amide (human, mouse, rat, bovine) (trifluoroacetate salt)

Item No. 28147

Formal Name:	L-arginyl-L-leucyl-L-valyl-L-arginyl-L-glutamyl-L-isoleucyl-L-alanyl-L-glutamyl-L- α -aspartyl-L-phenylalanyl-N ⁶ -methyl-L-lysyl-L-threonyl-L- α -aspartyl-L-leucyl-L-arginyl-L-phenylalanyl-L-glutamyl-L-seryl-L-seryl-L-alanyl-L-valinamide, trifluoroacetate salt	H-Arg-Leu-Val-Arg-Glu-Ile-Ala-Gln-Asp-Phe-Lys(Me1)-Thr-Asp-Leu-Arg-Phe-Gln-Ser-Ser-Ala-Val-NH ₂
Synonyms:	Histone H3 (69-89) (Lys ⁷⁹ me1) amide, [Lys(Me1)79]-Histone H3 (69-89) amide, RLVREIAQDF-K(Me1)-TDLRFQSSAV-NH ₂	• XCF ₃ COOH
MF:	C ₁₁₀ H ₁₈₂ N ₃₄ O ₃₂ • XCF ₃ COOH	
FW:	2,492.9	
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 H3K79Me1 (69-89) amide (human, mouse, rat, bovine) (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the histone H3K79Me1 (69-89) amide (human, mouse, rat, bovine) (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. Histone H3K79Me1 (69-89) amide (human, mouse, rat, bovine) (trifluoroacetate salt) is soluble in the organic solvent formic acid at a concentration of approximately 1 mg/ml.

Description

Histone H3K79Me1 (69-89) amide is a peptide fragment of histone H3 that corresponds to amino acid residues 70-90 of the human histone H3.1 and H3.2 sequences. Methylation of lysine 79 on histone H3 is associated with active chromatin and the silencing of telomere-associated genes by silent information regulator (Sir) proteins.¹ The conversion of H3K79Me1 to H3K79Me2/3 is associated with increased expression of mixed lineage leukemia (MLL) target genes, including *Hoxa9*.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. Deshpande, A.J., Deshpande, A., Sinha, A.U., et al. AF10 regulates progressive H3K79 methylation and HOX gene expression in diverse AML subtypes. *Cancer Cell* **26**(6), 896-908 (2014).

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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