# PRODUCT INFORMATION



Histone H3 (1-25) amide (human, mouse, rat, porcine, bovine) (trifluoroacetate salt)

Item No. 27521

Formal Name: L-alanyl-L-arginyl-L-threonyl-L-lysyl-L-

> glutaminyl-L-threonyl-L-alanyl-L-arginyl-L-lysyl-L-seryl-L-threonylglycylglycyl-L-lysyl-L-alanyl-L-prolyl-L-arginyl-Llysyl-L-glutaminyl-L-leucyl-L-alanyl-Lthreonyl-L-lysyl-L-alanyl-L-alaninamide,

trifluoroacetate salt

Synonym: ARTKQTARKSTGGKAPRKQLATKAA-NH2

MF: C<sub>110</sub>H<sub>202</sub>N<sub>42</sub>O<sub>32</sub> • XCF<sub>3</sub>COOH

FW: 2,625.1 **Purity:** ≥95% Supplied as: A solid -20°C Storage: Stability: ≥4 years H-Ala-Arg-Thr-Lys-Gln-Thr-Ala-Arg-Lys-Ser-Thr-Gly-Gly-Lys-Ala-Pro-Arg-Lys-Gln-Leu-Ala-Thr-Lys-Ala-Ala-NH<sub>2</sub> • XCF<sub>3</sub>COOH

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

### **Laboratory Procedures**

Histone H3 (1-25) amide (human, mouse, rat, porcine, bovine) (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the histone H3 (1-25) amide (human, mouse, rat, porcine, bovine) (trifluoroacetate salt) in water. The solubility of histone H3 (1-25) amide (human, mouse, rat, porcine, bovine) (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 (1-25) amide is an N-terminal peptide fragment of histone H3 that corresponds to amino acid residues 2-26 of the human histone H3 sequence. Histone H3 (1-25) amide contains lysine residues at positions 4 and 9 that are subject to methylation and acetylation and a serine residue at position 10 that is subject to phosphorylation, all of which have a role in the regulation of gene expression. Histone H3 (1-25) amide has been used to determine the substrate specificity of histone methyltransferases (HMTs).<sup>2</sup> It is a more efficient substrate for HMT G9a than histone H3 (15-39) and full-length histone H3.

### 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. Kumar, M., Zielinski, T., and Lowery, R.G. Biochemical assay development for histone methyltransferases using a transcreener-based assay for S-adenosylhomocysteine. Assay Drug Dev. Technol. 13(4) 200-209 (2015).

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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