

# PRODUCT INFORMATION

## Histone H3K14Ac (9-19) (human, mouse, rat, porcine, bovine) (trifluoroacetate salt)

Item No. 27529

<b>Formal Name:</b>	L-lysyl-L-seryl-L-threonylglycylglycyl-N <sup>6</sup> -acetyl-L-lysyl-L-alanyl-L-prolyl-L-arginyl-L-lysyl-L-glutamine, trifluoroacetate salt
<b>Synonyms:</b>	Histone H3 (9-19) (Lys <sup>14</sup> ac), H3K14Ac, KSTGG-K(Ac)-APRKQ, [Lys(Ac)14]-Histone H3 (9-19) H-Lys-Ser-Thr-Gly-Gly-Lys(Ac)-Ala-Pro-Arg-Lys-Gln-OH • XCF <sub>3</sub> COOH
<b>MF:</b>	C <sub>50</sub> H <sub>90</sub> N <sub>18</sub> O <sub>16</sub> • XCF <sub>3</sub> COOH
<b>FW:</b>	1,199.4
<b>Purity:</b>	≥95%
<b>Supplied as:</b>	A solid
<b>Storage:</b>	-20°C
<b>Stability:</b>	≥4 years

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

### Laboratory Procedures

Histone H3K14Ac (9-19) (human, mouse, rat, porcine, bovine) (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the histone H3K14Ac (9-19) (human, mouse, rat, porcine, bovine) (trifluoroacetate salt) in water. The solubility of histone H3K14Ac (9-19) (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 H3K14Ac (9-19) is a peptide fragment of histone H3 that corresponds to amino acid residues 10-20 of the human histone H3 sequence. Acetylation of H3K14 is associated with transcriptional activation and is required for trimethylation of H3K4.<sup>1-3</sup> Histone H3K14Ac (9-19) has been used to elucidate the structure of the *Tetrahymena* GCN5 histone acetyltransferase (HAT) domain.<sup>4</sup>

### References

1. Gatta, R. and Mantovani, R. Single nucleosome ChIPs identify an extensive switch of acetyl marks on cell cycle promoters. *Cell Cycle* **9**(11), 2149-2159 (2010).
2. Keating, S.T., van Diepen, J.A., Risken, N.P., et al. Epigenetics in diabetic nephropathy, immunity and metabolism. *Diabetologia* **61**(1), 6-20 (2018).
3. Nakanishi, S., Sanderson, B.W., Delventhal, K.M., et al. A comprehensive library of histone mutants identifies nucleosomal residues required for H3K4 methylation. *Nat. Struct. Mol. Biol.* **15**(8), 881-888 (2008).
4. Rojas, J.R., Trievel, R.C., Zhou, J., et al. Structure of *Tetrahymena* GCN5 bound to coenzyme A and a histone H3 peptide. *Nature* **401**(6748), 93-98 (1999).

#### 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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