

# PRODUCT INFORMATION



## Histone H3K27Ac (21-43)-GGK-biotin (trifluoroacetate salt)

Item No. 27763

**Formal Name:** L-alanyl-L-threonyl-L-lysyl-L-alanyl-L-alanyl-L-arginyl-N<sup>6</sup>-acetyl-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-prolylglycylglycyl-L-lysine-biotin, trifluoroacetate salt

**Synonyms:** ATKAAR-K(Ac)-SAPATGGVKKPHRYRPG-GK(Biotin), [Lys(Ac)27]-Histone H3 (21-43)-GGK(Biotin)

**MF:** C<sub>129</sub>H<sub>216</sub>N<sub>44</sub>O<sub>34</sub>S • XCF<sub>3</sub>COOH

**FW:** 2,959.5

**Purity:** ≥95%

**Supplied as:** A solid

**Storage:** -20°C

**Stability:** ≥4 years

H—Ala—Thr—Lys—Ala—Ala—Arg—Lys(Ac)—Ser—Ala—Pro—Ala—Thr—Gly—Gly—Val—Lys—Lys—Pro—His—Arg—Tyr—Arg—Pro—Gly—Gly—Lys(Biotin)—OH  
• XCF<sub>3</sub>COOH

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

### Laboratory Procedures

Histone H3K27Ac (21-43)-GGK-biotin (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the histone H3K27Ac (21-43)-GGK-biotin (trifluoroacetate salt) in water. The solubility of histone H3K27Ac (21-43)-GGK-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 H3K27Ac (21-43)-GGK-biotin is a peptide fragment of histone H3 that corresponds to amino acid residues 22-44 of the human histone H3.1 and H3.2 sequences. It is acetylated at lysine 27 and biotinylated via a C-terminal GGK linker. Acetylation of histone H3 at lysine 27 is associated with active gene transcription.<sup>1</sup> H3K27 acetylation and H3K4 monomethylation are enriched near active enhancers and H3K27 acetylation and H3K4 trimethylation together mark transcription start sites of actively transcribed genes.

### Reference

1. Kimura, H. Histone modifications for human epigenome analysis. *J. Hum. Genet.* **58(7)**, 439-445 (2013).

#### 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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