

# PRODUCT INFORMATION



## Histone H3K27Me2 (23-34) (trifluoroacetate salt)

Item No. 28142

Formal Name:	L-lysyl-L-alanyl-L-alanyl-L-arginyl-N <sup>6</sup> ,N <sup>6</sup> -dimethyl-L-lysyl-L-seryl-L-alanyl-L-prolyl-L-alanyl-L-threonylglycylglycine, trifluoroacetate salt		
Synonyms:	[Lys(Me2)27]-Histone H3 (23-34), Histone H3 (23-34) (Lys <sup>27</sup> me2), KAAR-K(Me2)-SAPATGG	H—Lys—Ala—Ala—Arg—Lys(Me2)—Ser—Ala—Pro—Ala—Thr—	
MF:	C <sub>48</sub> H <sub>87</sub> N <sub>17</sub> O <sub>15</sub> • XCF <sub>3</sub> COOH	Gly—Gly—OH	
FW:	1,142.3	• XCF <sub>3</sub> 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 H3K27Me2 (23-34) (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the histone H3K27Me2 (23-34) (trifluoroacetate salt) in water. The solubility of histone H3K27Me2 (23-34) (trifluoroacetate salt) in water is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

Histone H3K27Me2 (23-34) is a peptide fragment of histone H3 that corresponds to amino acid residues 24-35 of the human histone H3.1 and H3.2 sequences. Dimethylation of H3K27 is present on large chromatin domains across approximately 70% of total histone H3 and prevents firing of non-cell type-specific enhancers.<sup>1</sup> H3K27Me2 accumulates in gene bodies of genes with low levels of expression in mouse embryonic stem cells. Histone H3K27Me2 (23-34) has been used in epitope mapping of the lupus-derived monoclonal antibody BT164.<sup>2</sup>

### References

1. Ferrari, K.J., Scelfo, A., Jammula, S., *et al.* Polycomb-dependent H3K27me1 and H3K27me2 regulate active transcription and enhancer fidelity. *Mol. Cell* **53**(1), 49-62 (2014).
2. van Bavel, C.C., Dieker, J., Kroeze, Y., *et al.* Apoptosis-induced histone H3 methylation is targeted by autoantibodies in systemic lupus erythematosus. *Ann. Rheum. Dis.* **70**(1), 201-207 (2011).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 04/06/2023

#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897  
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM