PRODUCT INFORMATION



Histone H3K79Me3 (73-83) (human, mouse, rat, porcine, bovine)

(trifluoroacetate salt)

Item No. 27490

Formal Name: L-α-glutamyl-L-isoleucyl-L-alanyl-L-

> glutaminyl-L-α-aspartyl-L-phenylalanyl-6-(trimethylammonio)-L-norleucyl-Lthreonyl-L-α-aspartyl-L-leucyl-L-arginine,

trifluoroacetate salt

Synonyms: EIAQDF-K(Me3)-TDLR,

H3K79me3, Histone H3 (73-83) (Lys⁷⁹me3),

 ${\sf H-Glu-Ile-Ala-Gln-Asp-Phe-Lys(Me3)-Thr-Asp-Leu-Arg-OH}$ H-Glu-Ile-Ala-Gln-Asp-Phe-Lys(Me3)-Thr-

Asp-Leu-Arg-OH, • XCF₃COO-

[Lys(Me3)79]-Histone H3 (73-83)

MF: $C_{61}H_{101}N_{16}O_{20} \bullet XCF_3COO$

FW: 1,378.6 ≥95% **Purity:** Supplied as: A solid -20°C Storage: Stability: ≥4 years

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

Laboratory Procedures

Histone H3K79Me3 (73-83) (human, mouse, rat, porcine, bovine) (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the histone H3K79Me3 (73-83) (human, mouse, rat, porcine, bovine) (trifluoroacetate salt) in water. The solubility of histone H3K79Me3 (73-83) (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 H3K79Me3 (73-83) is a peptide fragment of histone H3 that corresponds to amino acid residues 74-84 of the human histone H3 sequence. Trimethylation of histone H3 at lysine 79 is found at promoter regions of both active and silenced genes in human CD4⁺T cells and positively correlates with transcriptional repression. H3K79 trimethylation is also found at pericentromeric heterochromatin in mouse oocytes and somatic cells.² Levels of H3K79Me3 are decreased in human tumor tissue compared to non-cancerous tissue.3

References

- 1. Barski, A., Cuddapah, S., Cui, K., et al. High-resolution profiling of histone methylations in the human genome. Cell 129(4), 823-837 (2007).
- 2. Ooga, M., Inoue, A., Kageyama, S., et al. Changes in H3K79 methylation during preimplantation development in mice. Biol. Reprod. 78(3), 413-424 (2008).
- Evanno, E., Godet, J., Piccirilli, N., et al. Tri-methylation of H3K79 is decreased in TGF-β1-induced epithelial-to-mesenchymal transition in lung cancer. Clin. Epigenetics 9:80 (2017).

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.

WARRANTY AND LIMITATION OF REMEDY

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

Copyright Cayman Chemical Company, 12/01/2022

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