

PRODUCT INFORMATION



Hexa-D-Arginine (trifluoroacetate salt)

Item No. 36065

Formal Name: D-arginyl-D-arginyl-D-arginyl-D-arginyl-D-arginyl-D-argininamide, trifluoroacetate salt

Synonyms: Furin Inhibitor II, Hexa-D-Arg-NH₂, Hexa-D-Arginine amide, D6R-NH₂, (D)RRRRRR-NH₂

MF: C₃₆H₇₅N₂₅O₆ • XCF₃COOH

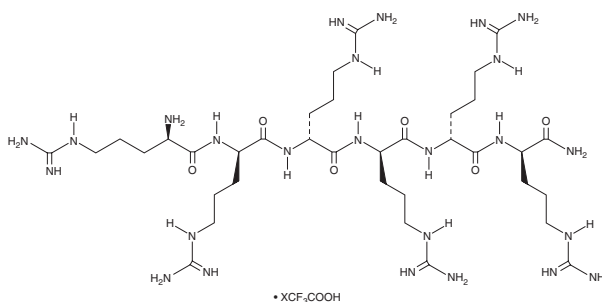
FW: 954.1

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

Hexa-D-arginine (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the hexa-D-arginine (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. Hexa-D-arginine (trifluoroacetate salt) has a solubility of approximately 1 mg/ml in an 80:20 solution of acetonitrile:water. We do not recommend storing the aqueous solution for more than one day.

Description

Hexa-D-arginine is an inhibitor of the proprotein convertase furin ($K_i = 100$ nM).¹ It also inhibits West Nile virus nonstructural protein 3 (NS3) protease ($K_i = 478$ nM). Hexa-D-arginine (1 µg/ml) reduces the proliferation, invasion, and migration of SW 1990 and PaTu 8988 pancreatic cancer cells, as well as decreases the levels of N-cadherin and vimentin and increases E-cadherin levels, markers of the epithelial-to-mesenchymal transition (EMT), in the same cells.² It improves survival in a rat model of anthrax toxemia induced by the anthrax toxins protective antigen and lethal factor.³

References

1. Shiryayev, S.A., Ratnikov, B.I., Chekanov, A.V., *et al.* Cleavage targets and the D-arginine-based inhibitors of the West Nile virus NS3 processing proteinase. *Biochem. J.* **393**(Pt 2), 503-511 (2006).
2. Zhou, M., Zhang, Y., Wei, H., *et al.* Furin inhibitor D6R suppresses epithelial mesenchymal transition in SW1990 and PaTu8988 cells via the Hippo YAP signaling pathway. *Oncol. Lett.* **15**(3), 3192-3196 (2018).
3. Sarac, M.S., Peinado, J.R., Leppla, S.H., *et al.* Protection against anthrax toxemia by hexa-D-arginine in vitro and in vivo. *Infect. Immun.* **72**(1), 605-605 (2004).

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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