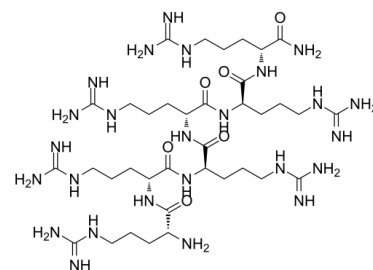


Data Sheet

Product Name:	Hexa-D-arginine
Cat. No.:	CS-7595
CAS No.:	673202-67-0
Molecular Formula:	C ₃₆ H ₇₅ N ₂₅ O ₆
Molecular Weight:	954.14
Target:	Others
Pathway:	Others
Solubility:	H ₂ O



BIOLOGICAL ACTIVITY:

Hexa-D-arginine (Furin Inhibitor II) is a stable **furin** inhibitor with K_i values 106 nM, 580 nM and 13.2 μ M for **furin**, PACE4 and prohormone convertase-1 (PC1), respectively. Hexa-D-arginine blocks Pseudomonas exotoxin A and anthrax toxins toxicity in vitro and in vivo^{[1][2][3]}. IC₅₀ & Target: K_i : 106 nM (Furin), 580 nM (PACE4) and 13.2 μ M (PC1)^[3] **In Vitro**: Hexa-D-arginine effectively blocks Pseudomonas aeruginosa exotoxin A (PEA)-induced cell lysis and is itself noncytotoxic^[1]. **In Vivo**: Administration of Hexa-D-arginine (0.1, 1, or 10 nM) to Pseudomonas aeruginosa exotoxin A (PEA)-treated mice (6-week-old FVB and 129/Sv mice) significantly improves their survival rate and also decreases circulating levels of TNF- α ^[1].

References:

- [1]. Sarac MS, et al. The furin inhibitor hexa-D-arginine blocks the activation of Pseudomonas aeruginosa exotoxin A in vivo. Infect Immun. 2002 Dec;70(12):7136-9.
- [2]. Sarac MS, et al. Protection against anthrax toxemia by hexa-D-arginine in vitro and in vivo. Infect Immun. 2004 Jan;72(1):602-5.
- [3]. Cameron A, et al. Polyarginines are potent furin inhibitors. J Biol Chem. 2000 Nov 24;275(47):36741-9.

CAIndexNames:

D-Argininamide, D-arginyl-D-arginyl-D-arginyl-D-arginyl-D-arginyl-

SMILES:

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Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 732-484-9848 Fax: 888-484-5008 E-mail: sales@ChemScene.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA