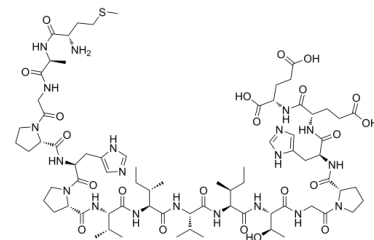


Data Sheet

Product Name:	NFAT Inhibitor-1
Cat. No.:	CS-7593
CAS No.:	249537-73-3
Molecular Formula:	C ₇₅ H ₁₁₈ N ₂₀ O ₂₂ S
Molecular Weight:	1683.93
Target:	Nuclear Factor of activated T Cells (NFAT)
Pathway:	Immunology/Inflammation
Solubility:	H ₂ O : 100 mg/mL (ultrasonic)



BIOLOGICAL ACTIVITY:

NFAT Inhibitor (VIVIT peptide) is a cell-permeable peptide inhibitor of **nuclear factor of activated T cells (NFAT)** that selectively inhibits calcineurin-mediated dephosphorylation of **NFAT**^{[1][2]}. IC₅₀ & Target: Nuclear factor of activated T cells (NFAT)^{[1][2]} *In Vitro*: NFAT Inhibitor treatment significantly inhibits nuclear translocation of NFATc1 for 24 hours. Long-term treatment with VIVIT significantly inhibits the cytoplasmic levels of cathepsin K, TRAP, and MMP-9^[2].

References:

- [1]. Aramburu J, et al. Affinity-driven peptide selection of an NFAT inhibitor more selective than cyclosporin A. *Science*. 1999 Sep 24;285(5436):2129-33.
- [2]. Ma JD, et al. Activation of the Peroxisome Proliferator-Activated Receptor γ Coactivator 1 β /NFATc1 Pathway in Circulating Osteoclast Precursors Associated With Bone Destruction in Rheumatoid Arthritis. *Arthritis Rheumatol*. 2019 Aug;71(8):1252-1264.

CAIndexNames:

L-Glutamic acid, L-methionyl-L-alanylglycyl-L-prolyl-L-histidyl-L-prolyl-L-valyl-L-isoleucyl-L-valyl-L-isoleucyl-L-threonylglycyl-L-prolyl-L-histidyl-L- α -glutamyl-

SMILES:

O=C([C@H]1N(CCC1)C(CNC([C@H](C)NC([C@@H](N)CCSC)=O)=O)=O)N[C@@H](CC2=CN=CN2)C(N3[C@@H](CCC3)C(N[C@@H](C(C)C)C(N[C@@H]([C@@H](C)CC)C(N[C@@H](C(C)C)C(N[C@@H]([C@@H](C)CC)C(N[C@@H]([C@H](O)C)C(NCC(N4[C@@H](CCC4)C(N[C@H](C(N[C@@H](CC(C(O)=O)C(N[C@H](C(O)=O)CCC(O)=O)=O)CC5=CN=CN5)=O)=O)=O)=O)=O)=O)=O)=O)=O

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

Tel: 610-426-3128

Fax: 888-484-5008

E-mail: sales@ChemScene.com

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