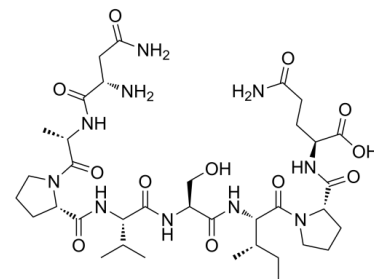


Data Sheet

Product Name:	Davunetide
Cat. No.:	CS-0024867
CAS No.:	211439-12-2
Molecular Formula:	C ₃₆ H ₆₀ N ₁₀ O ₁₂
Molecular Weight:	824.92
Target:	Amyloid-β; Microtubule/Tubulin
Pathway:	Cell Cycle/DNA Damage; Cytoskeleton; Neuronal Signaling
Solubility:	H ₂ O : 100 mg/mL (ultrasonic); DMSO : 125 mg/mL (ultrasonic)



BIOLOGICAL ACTIVITY:

Davunetide is an eight amino acid snippet derived from activity-dependent neuroprotective protein (ADNP), a neurotrophic factor that exists in the mammalian CNS. Davunetide possesses neuroprotective, neurotrophic and cognitive protective properties. Davunetide, a **microtubule-stabilizing** peptide, interacts with and stabilises neuron-specific βIII-tubulin in vitro. Davunetide penetrates the blood-brain barrier and is non-toxic. Davunetide inhibits Aβ aggregation and Aβ-induced neurotoxicity^{[1][2][3]}. *In Vivo*: Davunetide (2 μg/kg; Intranasally; daily, 5 days a week, for 16 weeks) shows protective effects for central nervous system complications in a diabetes rat model^[3].

References:

- [1]. Quraishie S, et al. NAP (davunetide) rescues neuronal dysfunction in a Drosophila model of tauopathy. *Mol Psychiatry*. 2013;18(7):834-842.
- [2]. Zhang J, et al. Davunetide improves spatial learning and memory in Alzheimer's disease-associated rats. *Physiol Behav*. 2017;174:67-73.
- [3]. Idan-Feldman A, et al. Davunetide (NAP) as a preventative treatment for central nervous system complications in a diabetes rat model. *Neurobiol Dis*. 2011;44(3):327-339.

CAIndexNames:

L-Glutamine, L-asparaginyl-L-alanyl-L-prolyl-L-valyl-L-seryl-L-isoleucyl-L-prolyl-

SMILES:

O=C(N(CCC1)[C@@H]1C(N[C@H](C(O)=O)CCC(N)=O)[C@H]([C@@H](C)CC)NC([C@H](CO)NC([C@H](C(C)C)NC([C@H](CCC2)N2C([C@H](C)N C([C@H](N)CC(N)=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 Q, Monmouth Junction, NJ 08852, USA