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DATASHEET

PKA inhibitor fragment (6-22) amide

Product overview

Name	PKA inhibitor fragment (6-22) amide
Cat No	HB0508
Alternative names	Protein kinase inhibitor-(6-22)-amide, PKI-(6-22)-amide
Biological action	Inhibitor
Description	Potent PKA inhibitor

Images



Biological Data

Biological description	Potent protein kinase A (PKA) inhibitor ($K_i = 1.6$ nM). Decreases long-term potentiation (LTP) at hippocampal synapses. Reverses morphine tolerance.
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Solubility & Handling

Storage instructions	-20 °C (desiccate)
Solubility overview	Soluble in acetonitrile
Important	This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.

Chemical Data

Molecular Weight	1868.08
Chemical structure	
Molecular Formula	$C_{80}H_{130}N_{28}O_{24}$
CAS Number	121932-06-7
PubChem identifier	16155227
SMILES	<chem>[H]N[C@@H]([C@@H](C)O)C(=O)N[C@@H](CC1=CC=C(O)C=C1)C(=O)N[C@@H](C)C(=O)N[C@@H](CC(O)=O)C(=O)N[C@@H](CC1=CC=CC=C1)C(=O)N[C@@H]([C@@H](C)CC)C(=O)N[C@@H](C)C(=O)N[C@@H](CO)C(=O)NCC(=O)N[C@@H](CCCNC(N)=N)C(=O)N[C@@H]([C@@H](C)O)C(=O)NCC(=O)N[C@@H](CCCNC(N)=N)C(=O)N[C@@H]([C@@H](C)C(N)=O)C(=O)N[C@@H](C)C(=O)N[C@@H]([C@@H](C)CC)C(N)=O</chem>
InChiKey	VAKHFAFLRUNHLQ-PEBJKXEYSA-N

References

Protein kinase inhibitor-(6-22)-amide peptide analogs with standard and nonstandard amino acid substitutions for phenylalanine 10. Inhibition of cAMP-dependent protein kinase.

Glass DB *et al* (1989) J Biol Chem 264(24)

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Inhibition of the cAMP pathway decreases early long-term potentiation at CA1 hippocampal synapses.

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Alterations in brain Protein Kinase A activity and reversal of morphine tolerance by two fragments of native Protein Kinase A inhibitor peptide (PKI).

Dalton GD *et al* (2005) Neuropharmacology 48(5)

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