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Product Information

Protein Kinase Inhibitor from rabbit

Product Number **P 0300**
Storage Temperature -0 °C

Product Description

Molecular Formula: $C_{94}H_{148}N_{32}O_{31}$
Molecular Weight: 2222.4
CAS Number 99534-03-9

Synonyms: Thr-Thr-Tyr-Ala-Asp-Phe-Ile-Ala-Ser-Gly-Arg-Thr-Gly-Arg-Arg-Asn-Ala-Ile-His-Asp, IP-20
Protein kinase inhibitor (IP-20) from rabbit consists of a 20 amino acid peptide which will inhibit cyclic AMP dependent protein kinase. It acts by binding to the catalytic subunit of cAMP dependent protein kinase, but not the holoenzyme. This synthetic inhibitor has a K_i value of 2.3 nM and the inhibition has been found to be competitive with respect to the protein substrate.¹ IP-20 has also been reported to abolish the Na:K pump effect of cAMP agonists involved in the intracellular signalling in the regulation of renal Na-K-ATPase.²

Precautions and Disclaimer

For Laboratory Use Only. Not for drug, household or other uses.

Preparation Instructions

This peptide is soluble in water (10 mg/ml), yielding a clear solution.

References

1. Cheng, H.C., et al., A potent synthetic peptide inhibitor of the cAMP dependent protein kinase. *J. Biol. Chem.*, **261**, 989-992 (1986).
2. Satoh, T., et al., Intracellular signalling in the regulation of renal Na-K-ATPase. I. Role of cyclic AMP and phospholipase A2. *J. Clin. Invest.*, **89(5)**, 1496-1500 (1992).

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