Sp-5,6-DCI-cBIMPS

Product Number S 6069
Store at −70 °C

CAS RN: 120912-54-1 (Free acid)
Synonym: 5,6-Dichloro-1-β-D-ribofuranosylbenzimidazole-3',5'-cyclic monophosphorothioate, Sp- isomer, sodium salt

Molecular Formula: C_{12}H_{10}Cl_{2}N_{2}O_{5}PSNa
Molecular Weight: 419.15

Product Description
Sp-5,6-DCI-cBIMPS is an analog of the second messenger cyclic AMP in which the adenine is replaced by a highly lipophilic modified benzimidazole ring. In addition, the axial exocyclic oxygen atom in the cyclic phosphate group is replaced by sulfur.

Sp-5,6-DCI-cBIMPS is a potent activator of cAMP-dependent protein kinase (cAK), and has exhibited a special preference for the B site of cAK type II. Its high lipophilicity and metabolic stability results in excellent membrane permeability. It is especially useful for studies with intact cells and can be used for synergistic activation of cAK II by pairs of cAMP analogs.

Precautions and Disclaimer
This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions
Sp-5,6-DCI-cBIMPS is soluble in water at ~1 mM. It is also soluble in DMSO, ethanol

Storage/Stability
Store at −70 °C.

References

AH/PHC 11/04