

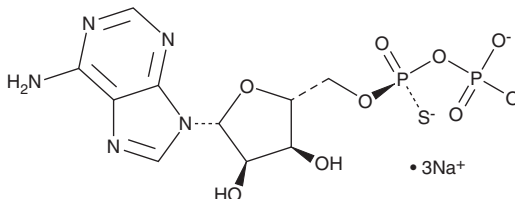
PRODUCT INFORMATION



Sp-Adenosine-5'-O-(1-thiodiphosphate) (sodium salt)

Item No. 38534

CAS Registry No.: 2005478-90-8
Formal Name: adenosine, 5'→P'-ester with [P'(S)]-thiodiphosphoric acid ((HO)2P(O)OP(O)(OH)(SH)), trisodium salt
Synonym: Sp-ADP-α-S
MF: C₁₀H₁₂N₅O₉P₂S • 3Na
FW: 509.2
Purity: ≥95%
Supplied as: A solution in water
Storage: -80°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Description

Sp-Adenosine-5'-O-(1-thiodiphosphate) (Sp-ADP-α-S) is an isomer of the sulfur-containing nucleotide derivative ADP-α-S.¹ It is an inhibitor of phosphorylase kinase ($K_i = 0.53 \mu\text{M}$). Sp-ADP-α-S induces aggregation of isolated human platelets ($\text{EC}_{50} = 20 \mu\text{M}$).² It induces relaxation of carbamylcholine-precontracted guinea pig taenia coli ($\text{EC}_{50} = 58.9 \mu\text{M}$).³

References

1. Cheng, A. and Carlson, G.M. Competition between nucleoside diphosphates and triphosphates at the catalytic and allosteric sites of phosphorylase kinase. *J. Biol. Chem.* **263**(12), 5543-5549 (1988).
2. Cusack, N.J. and Hourani, S.M. Effects of R_p and S_p diastereoisomers of adenosine 5'-O-(1-thiodiphosphate) on human platelets. *Br. J. Pharmacol.* **73**(2), 409-412 (1981).
3. Burnstock, G., Cusack, N.J., and Meldrum, L.A. Effects of phosphorothioate analogues of ATP, ADP and AMP on guinea-pig taenia coli and urinary bladder. *Br. J. Pharmacol.* **82**(2), 369-374 (1984).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM