PRODUCT INFORMATION



Adenosine-5'-O-(2-thiodiphosphate) (sodium salt)

Item No. 38360

Formal Name: 5'-adenylic acid, anhydride

with phosphorothioic acid,

trisodium salt

Synonym: ADP-β-S

MF: $C_{10}H_{12}N_5O_9P_2S \bullet 3Na$

509.2 FW: **Purity:** ≥95%

Supplied as: A solution in water

Storage: -80°C Stability: ≥2 years

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

Description

Adenosine-5'-O-(2-thiodiphosphate) is an agonist of purinergic P2Y receptors.¹ It increases glucose-stimulated insulin release in isolated rat pancreas when used at concentrations ranging from 49.5 to 495 nM. Adenosine-5'-O-(2-thiodiphosphate) (1.5 µM) induces vasodilation in isolated rat pancreas and relaxation in isolated rat aortic rings precontracted by serotonin (5-HT; Item No. 14332) with an EC₅₀ value of 0.09 μM.² It increases insulin secretion and reduces elevated glucose levels in fasted dogs when administered at a dose of 0.1 mg/kg.³

References

- 1. Bertrand, G., Chapal, J., Puech, R., et al. Adenosine-5'-O-(2-thiodiphosphate) is a potent agonist at P2 purinoceptors mediating insulin secretion from perfused rat pancreas. Br. J. Pharmacol. 102(3), 627-630 (1991).
- 2. Saïag, B., Hillaire-Buys, D., Chapal, J., et al. Study of the mechanisms involved in adenosine-5'-O-(2thiodiphosphate) induced relaxation of rat thoracic aorta and pancreatic vascular bed. Br. J. Pharmacol. 118(3), 804-810 (1996).
- 3. Hillaire-Buys, D., Chapal, J., Bertrand, G., et al. Purinergic receptors on insulin-secreting cells. Fundam. Clin. Pharmacol. 8(2), 117-127 (1993).

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

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.

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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