

PRODUCT INFORMATION

2'(3')-O-(5-Chloroanthraniloyl)adenosine-5'-O-triphosphate (sodium salt) Item No. 38449

Formal Name: 2'(or 3')-[N-(2-aminoethyl)carbamate]
adenosine 5'-(tetrahydrogen
triphosphate), tetrasodium salt

Synonym: 2'(3')-chloro ANT-ATP

MF: C₁₇H₁₆ClN₆O₁₄P₃ • 4Na

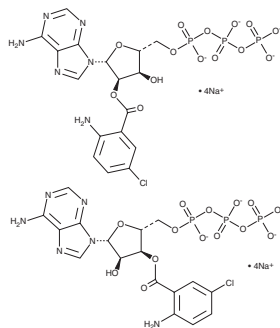
FW: 748.7

Purity: ≥95% (mixture of isomers)

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

2'-O-(5-Chloroanthraniloyl)adenosine-5'-O-triphosphate (2'-chloro ANT-ATP) and 3'-chloro ANT-ATP are fluorescent ATP derivatives, which undergo spontaneous isomerization.¹ 2'(3')-chloro ANT-ATP is an inhibitor of mammalian adenylyl cyclase 1 (AC1), AC2, and AC5 (K_s = 80, 490, and 45 nM, respectively), *B. anthracis* edema factor AC toxin (K_i = 170 nM), and *B. pertussis* AC toxin CyaA (K_i = 350 nM).^{1,2} A related derivative, 2'(3')-ANT-ATP (Item No. 38546), displays an emission maximum of 428 nm upon excitation at 330 nm.³

References

1. Geduhn, J., Dove, S., Shen, Y., *et al.* Bis-halogen-anthraniloyl-substituted nucleoside 5'-triphosphates as potent and selective inhibitors of *Bordetella pertussis* adenylyl cyclase toxin. *J. Pharmacol. Exp. Ther.* **336**(1), 104-115 (2011).
2. Taha, H., Dove, S., Geduhn, J., *et al.* Inhibition of the adenylyl cyclase toxin, edema factor, from *Bacillus anthracis* by a series of 18 mono- and bis-(M)ANT-substituted nucleoside 5'-triphosphates. *Naunyn Schmiedeberg's Arch. Pharmacol.* **385**(1), 57-68 (2012).
3. Hiratsuka, T. New ribose-modified fluorescent analogs of adenine and guanine nucleotides available as substrates for various enzymes. *Biochim. Biophys. Acta* **742**(3), 496-508 (1983).

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.

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