

PRODUCT INFORMATION



N⁶-Benzyladenosine-5'-O-triphosphate (sodium salt)

Item No. 38371

Formal Name: ((2R,3S,4R,5R)-5-(6-(benzylamino)-9H-purin-9-yl)-3,4-dihydroxytetrahydrofuran-2-yl)methyl triphosphate, tetrasodium salt

Synonym: N⁶-benzyl ADP

MF: C₁₇H₁₈N₅O₁₃P₃ • 4Na

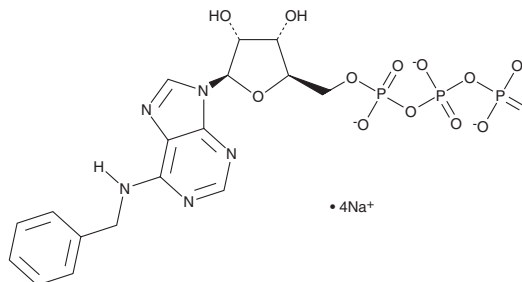
FW: 685.2

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

N⁶-Benzyladenosine-5'-O-triphosphate is an N-phenyl-substituted derivative of ATP and a ligand used for bump and hole, a technique to study single protein isoforms when familial homology would interfere with other isoform-selective approaches.¹ It is 7-fold selective for inhibiting the ATP binding and ATPase activity of myosin light chain (MLC) containing a tyrosine-to-glycine substitution at position 61 (MLC^{Y61G}) over the wild-type enzyme. N⁶-Benzyladenosine-5'-O-triphosphate has been used to develop a technique to identify substrates of the programmed cell death-suppressor kinase AvrPto-dependent Pto-interacting protein 3 (Adi3) in tomato plants.²

References

1. Gillespie, P.G., Gillespie, S.K., Mercer, J.A., *et al.* Engineering of the myosin-I β nucleotide-binding pocket to create selective sensitivity to N⁶-modified ADP analogs. *J. Biol. Chem.* **274**(44), 31373-31381 (1999).
2. Dittrich, A.C.N. and Devarenne, T.P. An ATP analog-sensitive version of the tomato cell death suppressor protein kinase Adi3 for use in substrate identification. *Biochim. Biophys. Acta* **1824**(2), 269-273 (2012).

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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