

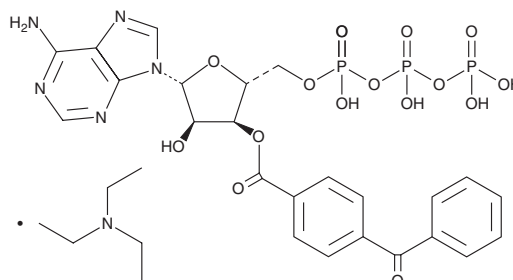
PRODUCT INFORMATION



BzATP (triethylammonium salt)

Item No. 15577

Formal Name: adenosine 5'-(tetrahydrogen triphosphate), 3'-(4-benzoylbenzoate), compd. with N,N-diethylethanamine (1:1)
MF: C₂₄H₂₄N₅O₁₅P₃ • C₆H₁₅N
FW: 816.6
Purity: ≥75% (mixture of regioisomers)
UV/Vis.: λ_{max}: 257 nm
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

BzATP (triethylammonium salt) is supplied as a solid. A stock solution may be made by dissolving the BzATP (triethylammonium salt) in the solvent of choice, which should be purged with an inert gas. BzATP (triethylammonium salt) is soluble in the organic solvent DMSO at a concentration of approximately 14 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of BzATP (triethylammonium salt) can be prepared by directly dissolving the solid in aqueous buffers. The solubility of BzATP (triethylammonium salt) in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

The P2X purinergic receptors are ligand-gated ion channels that are activated by extracellular ATP. BzATP (ammonium salt) is an activator of the P2X receptors that exhibits 5-30-fold greater potency at the P2X₇ receptor than ATP.¹⁻³ It activates the human, rat, and mouse receptors with EC₅₀ values of 0.7, 3.6, and 285 μM, respectively.⁴ BzATP is not selective for P2X₇ as it can potently activate other P2X receptors, but without the marked superiority to ATP as an agonist.^{1-2,5} BzATP can also be used as a photoaffinity probe to study adenine nucleotide binding to ATPases.⁶

References

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3. Michel, A.D., Xing, M., and Humphrey, P.P. *S Br. J. Pharmacol.* **132(7)**, 1501-1508 (2001).
4. Young, M.T., Pelegrin, P., and Surprenant, A. *Mol. Pharmacol.* **71(1)**, 92-100 (2007).
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6. Williams, N. and Coleman, P.S. *J. Biol. Chem.* **257(6)**, 2834-2841 (1982).

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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