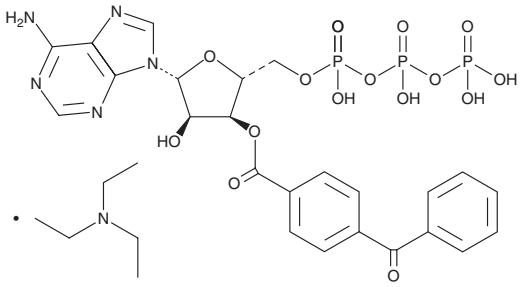
PRODUCT INFORMATION

BzATP (triethylammonium salt)

Item No. 15577

Formal Name:	adenosine 5′-(tetrahydrogen triphosphate), 3′-(4-benzoylbenzoate), compd. with N,N-diethylethanamine (1:1)
MF:	$C_{24}H_{24}N_5O_{15}P_3 \bullet C_6H_{15}N$
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 $P2X_7$ receptor than ATP.[1-3] It activates the human, rat, and mouse receptors with EC_{50} values of 0.7, 3.6, and 285 µM, respectively.[4] BzATP is not selective for $P2X_7$ 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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