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DATASHEET

BzATP triethylammonium salt

Product overview

Name	BzATP triethylammonium salt
Cat No	HB1986
Biological action	Agonist
Purity	>95%
Description	Prototypic $P2X_7$ receptor agonist

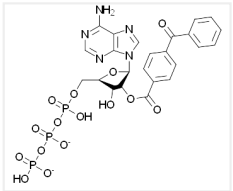
Biological Data

Biological description	Prototypic $P2X_7$ receptor agonist (EC_{50} = 3.6, 7 and 285 µM at rat, human and mouse receptors respectively). 5-10 times more potent than ATP at activating $P2X_7$ receptors. Additionally shows activity at other P2 receptor (pEC_{50} values are 8.7, 7.1 and 6.1 at $P2X_1$, $P2X_3$, $P2X_{2/3}$ respectively). Also acts as an ATPase photoaffinity label. Evokes intracellular Yo-Pro-1 (Oxazole Yellow) accumulation.

Solubility & Handling

Storage instructions	-20°C
Solubility overview	Soluble in water
Important	This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.

Chemical Data

Chemical name	2'(3')-*O*-(4-Benzoylbenzoyl)adenosine- 5'-triphosphate tri(triethylammonium) salt
Molecular Weight	1018.97
Chemical structure	
Molecular Formula	$C_{24}H_{24}N_5O_{15}P_3.C_{18}H_{45}N_3$
CAS Number	112898-15-4
PubChem identifier	71308559
SMILES	NC1=C2C(N([C@@H]3O[C@H](COP(OP(OP(O)([O-])=O)([O-])=O)([O-])=O)[C@@H](OC(C4=CC=C(C(C5=CC=CC=C5)=O)C=C4)=O)[C@H]3O)C=N2)=NC=N1.CC[NH+](CC)CC.CC[NH+](CC)CC.CC[NH+](CC)CC.NC6=C7C(N([C@@H]8O[C@H](COP(OP(OP(O)([O-])=O)([O-])=O)([O-])=O)[C@@H](O)[C@H]8OC(C9=CC=C(C(C%10=CC=CC=C%10)=O)C=C9)=O)C=N7)=NC=N6.CC[NH+](CC)CC.CC[NH+](CC)CC.CC[NH+](CC)CC
InChi	InChI=1S/C24H24N5O15P3.C6H15N/c25-21-17-22(27-11-26-21)29(12-28-17)23-19(31)20(16(41-23)10-40-46(36,37)44-47(38,39)43-45(33,34)35)42-24(32)15-8-6-14(7-9-15)18(30)13-4-2-1-3-5-13;1-4-7(5-2)6-3/h1-9,11-12,16,19-20,23,31H,10H2,(H,36,37)(H,38,39)(H2,25,26,27)
InChiKey	HVOVBTNCGADRTH-WBLDMZOZSA-N
MDL number	MFCD00058547

References

Amino acid residues in the P2X7 receptor that mediate differential sensitivity to ATP and BzATP

Young et al. (2007) Mol Pharmacol. 92-100
PubMedID 17032903

The cytolytic P2Z receptor for extracellular ATP identified as a P2X receptor (P2X7)

Surprenant et al (1996) Science. 5262
PubMedID 8614837

Pharmacological and molecular characterization of P2X receptors in rat pelvic ganglion neurons

Zhong et al (1998) Br J Pharmacol. 771-81
PubMedID 9831914