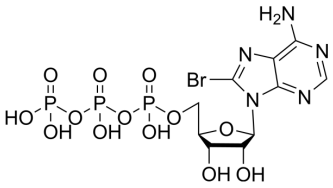
8-Bromo-ATP

Cat. No.:	HY-134262
CAS No.:	23567-97-7
Molecular Formula:	$C_{10}H_{15}BrN_5O_{13}P_3$
Molecular Weight:	586.08
Target:	P2X Receptor
Pathway:	Membrane Transporter/Ion Channel
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description

8-Bromo-ATP (8-Bromoadenosine 5'-triphosphate), an ATP analogue, is a purinergic P2X receptor agonist. 8-Bromo-ATP shows cytotoxic to multiple myeloma cells with an IC_{50} of 23.1 μM[1][2][3].

In Vitro

8-Bromo-ATP (10-50 μM; 5 days) treatment shows cytotoxic to multiple myeloma[3].
Fluorescence measurements are made possible through the use of 8-Bromo-ATP, which selectively quenched certain tryptophan residues of the ATPase. 8-Bromo-ATP enhances the rate of dephosphorylation of native ATPase 2-3-fold when added in the absence of divalent cations[2].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Cell Viability Assay[3]

Cell Line:	MM 1.s cells
Concentration:	10 μM, 20 μM, 30 μM, 40 μM, 50 μM
Incubation Time:	5 days
Result:	Showed cytotoxic to multiple myeloma.

REFERENCES

[1]. Howson, W, et al. Synthesis and biological evaluation of ATP analogues acting at putative purinergic P2X-receptors (on the guinea pig bladder). Eur. J. Med. Chem. 23(5), 433-439 (1988).

[2]. P Champeil, et al. ATP regulation of sarcoplasmic reticulum Ca2+-ATPase. Metal-free ATP and 8-bromo-ATP bind with high affinity to the catalytic site of phosphorylated ATPase and accelerate dephosphorylation. J Biol Chem. 1988 Sep 5;263(25):12288-94.

[3]. Li Wang, et al. Cationic phospholiposomes: efficient delivery vehicles of anticancer derivatives of ATP to multiple myeloma cells. J Liposome Res. 2011 Dec;21(4):306-14.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA