Data Sheet (Cat.No.T37106)

TargetMol

2'-Deoxyadenosine-5'-triphosphate (sodium salt hydrate)

Chemical Properties

CAS No. :

Formula:

Molecular Weight:

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	2'-Deoxyadenosine-5'-triphosphate (dATP) is a purine nucleotide and derivative of the nucleic acid adenosine 5'-triphosphate .1dATP is a substrate for DNA polymerase in the synthesis of DNA.2It is a noncompetitive inhibitor of ribonucleotide reductases, which provides feedback inhibition during DNA synthesis.1dATP has commonly been used in DNA synthesis, sequencing, and labeling in research applications.3,4dATP accumulates in adenosine deaminase deficiency, a disorder characterized by mutations in the gene for adenosine deaminase, the enzyme that catalyzes the deamination of adenosine and deoxyadenosine.5
Targets(IC50)	Others

Solubility Information

Solubility	PBS (pH 7.2): 10 mg/mL,Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Reference

Berg, J.M., Tymoczko, J.L., and Stryer, L.Key steps in nucleotide biosynthesis are regulated by feedback inhibitionBiochemistry(2002)

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Cadwell, R.C., and Joyce, G.F.Randomization of genes by PCR mutagenesisPCR Methods Appl.2(1)28-33(1992)

Steffens, D.L., Jang, G.Y., Sutter, S.L., et al.An infrared fluorescent dATP for labeling DNAGenome Res.5(4)393-399(1995)

Flinn, A.M., and Gennery, A.R.Adenosine deaminase deficiency: A reviewOrphanet J. Rare Dis.13(1)65(2018)

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