

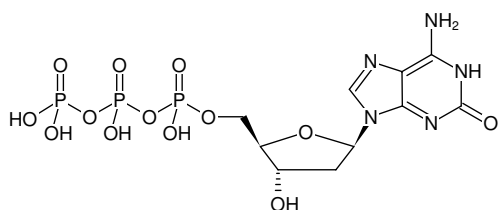
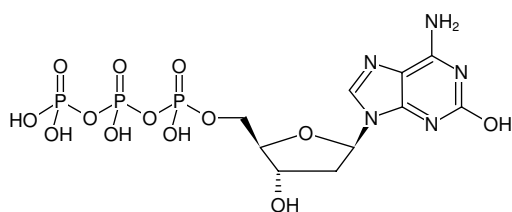


2-Hydroxy-dATP

Isoguanosine-5'-Triphosphate, (iso-dGTP)

2-Hydroxy-2'-deoxyadenosine-5'-triphosphate, Triethylammonium salt

Cat. No.	Amount
NU-1209S	10 µl (100 mM)
NU-1209L	5 x 10 µl (100 mM)



Structural formula of 2-Hydroxy-dATP

For research use only!

Shipping: shipped on blue ice

Storage Conditions: store at -20 °C

Short term exposure (up to 1 week cumulative) to ambient temperature possible.

Shelf Life: 12 months after date of delivery

Molecular Formula: C₁₀H₁₆N₅O₁₃P₃

Molecular Weight: 507.18 g/mol

Exact Mass: 507.00 g/mol

Purity: ≥ 95 % (HPLC)

Form: solution in water

Color: colorless to slightly yellow

Concentration: 100 mM - 110 mM

pH: 7.5 ± 0.5

Spectroscopic Properties: λ_{max} 292 nm, ε 10.1 L mmol⁻¹ cm⁻¹ (Tris-HCl pH 7.5)

Selected References:

Xu *et al.* (2006) [An optimized method for construction of genomic library]. *Yi Chuan.* **28** (6):717.

Xia *et al.* (2005) Transient state kinetic studies of the MutT-catalyzed nucleoside triphosphate pyrophosphohydrolyase reaction. *Biochemistry* **44** (46):15334.

Kamiya *et al.* (2004) Mutagenesis by damaged deoxyribonucleotides and its prevention by MutT-type hydrolyzing enzymes. *Nucleic Acids Symp Ser (Oxf)* **48**:271.

Satou *et al.* (2003) Mutations induced by 2-hydroxy-dATP during in vitro replication with a HeLa extract. *Nucleic Acids Res Suppl.* **3**:325.

Satou *et al.* (2003) Mutagenic effects of 2-hydroxy-dATP on replication in a HeLa extract: induction of substitution and deletion mutations. *NNucleic Acids Res.* **31** (10):2570.

Saraswat *et al.* (2002) Interactions of the products, 8-oxo-dGMP, dGMP, and pyrophosphate with the MutT nucleoside triphosphate pyrophosphohydrolyase. *Biochemistry* **41** (52):15566.

Kamiya *et al.* (2001) Hydrolysis of oxidized nucleotides by the Escherichia coli Orf135 protein. *Biochem Biophys Res Commun.* **48**:271.

Kamiya *et al.* (2000) Two DNA polymerases of Escherichia coli display distinct misinsertion specificities for 2-hydroxy-dATP during DNA synthesis. *Biochemistry* **39** (31):9508.

Kamiya *et al.* (2000) 2-Hydroxy-dATP is incorporated opposite G by Escherichia coli DNA polymerase III resulting in high mutagenicity. *Nucleic Acids Res.* **28** (7):1640.