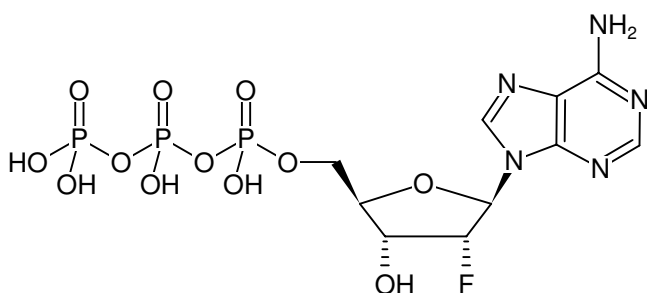


**2'-Fluoro-dATP**

(2'F-dATP)

2'-Fluoro-2'-deoxyadenosine-5'-triphosphate, Sodium salt

Cat. No.	Amount
NU-151S	50 µl (100 mM)
NU-151L	5 x 50 µl (100 mM)



Structural formula of 2'-Fluoro-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:** C<sub>10</sub>H<sub>15</sub>N<sub>5</sub>O<sub>12</sub>P<sub>3</sub>F (free acid)**Molecular Weight:** 509.17 g/mol (free acid)**Exact Mass:** 508.99 g/mol (free acid)**Purity:** ≥ 95 % (HPLC)**Form:** clear aqueous solution**Concentration:** 100 mM - 110 mM**pH:** 7.5 ± 0.5**Spectroscopic Properties:** λ<sub>max</sub> 259 nm, ε 15.4 L mmol<sup>-1</sup> cm<sup>-1</sup> (Tris-HCl pH 7.0)**Applications:**Substrate for ATP-requiring enzymes<sup>[1]</sup>NMR-studies with F19<sup>[1]</sup>Insertion sensitive NMR reporter group in RNA<sup>[2]</sup>Inhibition of human DNA topoisomerases<sup>[3]</sup>**Selected References:**[1] Stockman (2008) 2-Fluoro-ATP as a versatile tool for 19F NMR-based activity screening. *J. Am. Chem. Soc.* **130** (18):5870.[2] Scott *et al.* (2004) Enzymatic synthesis of 19F NMR studies of 2-fluoro-adenine-substituted RNA. *J. Am. Chem. Soc.* **126** (38):11776.[3] Liu *et al.* (1989) Interaction of several nucleoside triphosphate analogs and 10-hydroxycamptothecin with human DNA topoisomerases. *Cancer Research* **49** (6):1366.Cho *et al.* (2003) Use of nucleotide analogs by class I and class II CCA-adding enzymes (tRNA nucleotidyltransferase): deciphering the basis for nucleotide selection. *RNA* **9** (8):970.Rhie *et al.* (2003) Characterization of 2'-fluoro-RNA aptamers that bind preferentially to disease-associated conformations of prion protein and inhibit conversion. *J. Biol. Chem.* **278** (41):39697.Sun *et al.* (2000) Catalytic nucleic acids: from lab to applications. *Pharmacol. Rev.* **52** (3):325.Jayasena (1999) Aptamers: an emerging class of molecules that rival antibodies in diagnostics. *Clin. Chem.* **45** (9):1628.Ono *et al.* (1997) 2'-Fluoro modified nucleic acids: polymerase-directed synthesis, properties and stability to analysis by matrix-assisted laser desorption/ionization mass spectrometry. *Nucleic Acids Res.* **25** (22):4581.