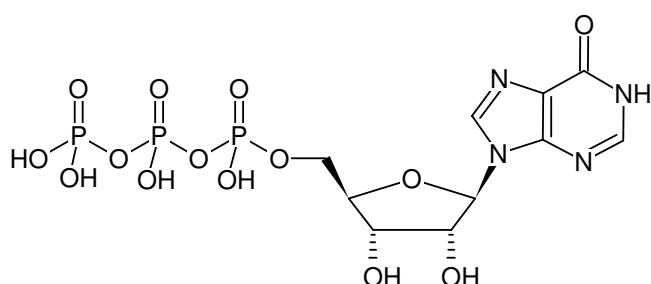




## ITP

Inosine-5'-triphosphate, Sodium salt

Cat. No.	Amount
NU-1203S	15 µl (100 mM)
NU-1203L	5 x 15 µl (100 mM)



Structural formula of ITP

**For research use only!****Shipping:** shipped on gel packs**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>4</sub>O<sub>14</sub>P<sub>3</sub> (free acid)**Molecular Weight:** 508.16 g/mol (free acid)**Exact Mass:** 507.98 g/mol (free acid)**CAS#:** 35908-31-7**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<sub>max</sub> 249 nm, ε 12.2 L mmol<sup>-1</sup> cm<sup>-1</sup> (Tris-HCl pH 7.5)**Specific Ligands:**Specific and agonistic ligand for P2Y<sub>4</sub> receptor<sup>[1]</sup>**Selected References:**[1] Vial and Evans (2002) P2X1 receptor-deficient mice establish the native P2X receptor and P2Y6-like receptor in arteries. *Molec. Pharmacol.* **62** (6):1438.Bao *et al.* (2008) Coordination of two sequential ester-transfer reactions: exogenous guanosine binding promotes the subsequent wG binding to a group I intron. *Nucleic Acids Research* **36** (21):6934.Chang *et al.* (2005) Nitric Oxide-dependent Allosteric Inhibitory Role of a Second Nucleotide Binding Site in Soluble Guanylyl Cyclase. *J. Biol. Chem.* **280** (12):11513.Bianchi *et al.* (2001) Intramolecular equilibria in metal ion complexes of guanosine 5'-triphosphate (GTP (4-)) and inosine 5'-triphosphate (ITP(4-)) in aqueous solution. *J. Inorg. Biochem.* **86** (1):148.Noji *et al.* (2001) Purine but not pyrimidine nucleotides support rotation of F (1)-ATPase. *J. Biol. Chem.* **276** (27):25480.Chakrabarti *et al.* (2000) Nucleoside triphosphate specificity of tubulin. *Biochemistry* **39** (33):10269.Jacob *et al.* (2000) Involvement of asparagine 118 in the nucleotide specificity of the catalytic subunit of protein kinase CK2. *FEBS Lett.* **466** (2-3):363.Seifert *et al.* (1999) Effects of guanine, inosine, and xanthine nucleotides on beta (2)-adrenergic receptor/G (s) interactions: evidence for multiple receptor conformations. *Mol. Pharmacol.* **56** (2):348.Wang *et al.* (1999) Identification of residues of Escherichia coli phosphofructokinase that contribute to nucleotide binding and specificity. *Biochemistry* **38** (14):4313.Nakahara *et al.* (1998) Inosine 5'-triphosphate can dramatically increase the yield of NASBA products targeting GC-rich and intramolecular base-paired viroid RNA. *Nucleic Acids Res.* **26** (7):1854.Sasaki *et al.* (1998) Identification of stable RNA hairpins causing band compression in transcriptional sequencing and their elimination by use of inosine triphosphate. *Gene* **222** (1):17.Klinker *et al.* (1997) Functionally nonequivalent interactions of guanosine 5'-triphosphate, inosine 5'-triphosphate, and xanthosine 5'-triphosphate with the retinal G-protein, transducin, and with G (i)-proteins in HL-60 leukemia cell membranes. *Biochem. Pharmacol.* **54** (5):551.Pollardknight *et al.* (1987) Kinetics of Hexokinase-D (Glucokinase) with inosine triphosphate as phosphate donor - loss of kinetic cooperativity with respect to glucose. *Biochem. J.* **245** (3):625.Chanda *et al.* (1983) In vitro synthesis of genome length complementary RNA of vesicular stomatitis-virus in the presence of inosine 5'-triphosphate. *Virology* **129** (1):225.

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