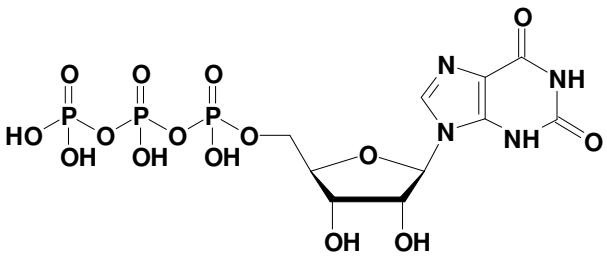
XTP

Xanthosine-5'-triphosphate, Triethylammonium salt

Cat. No.	Amount
NU-602S	150 Units
NU-602L	750 Units



Cat. No.: NU-602

Molecular Formula: $C_{10}H_{15}N_4O_{15}P_3$ (free acid)

Molecular Weight: 524.16 (free acid)

Purity: > 95%, clear aqueous solution, pH 7.5

Spectroscopic Properties: λ_{max} 276 nm; ϵ 9600

Storage conditions:
Short term exposure (up to 1 week cumulative) to ambient temperature possible. Long term storage at < -20°C. If stored as recommended, Jena Bioscience guarantees optimal performance of this product for 12 months after date of delivery.

For research use only!

* 1 unit = 1 μl of a 10 mM solution

Applications:

Inhibitor of adenylyl and guanylyl cyclase[1]

Specific Ligands:

Soluble guanylyl cyclase[2]

XTP

Xanthosine-5′-triphosphate, Triethylammonium salt

Selected References:

[1] Spangler *et al.* (2011) Interaction of the diguanylate cyclase YdeH of Escherichia coli with 2′,(3′)-substituted purine and pyrimidine nucleotides. *J. Pharmacol. Exp. Ther.* **336 (1)**:234.

[2] Chang *et al.* (2005) Nitric Oxide-dependent Allosteric Inhibitory Role of a Second Nucleotide Binding Site in Soluble Guanylyl Cyclase. *The journal of biological chemistry* **280 (12)**:11513.

Beste *et al.* (2012) Nucleotidyl cyclase activity of soluble guanylyl cyclase $\alpha 1\beta 1$. *Biochemistry* **51 (1)**:194.

Spangler *et al.* (2011) Interaction of the diguanylate cyclase YdeH of Escherichia coli with 2′,(3′)-substituted purine and pyrimidine nucleotides. *J Pharmacol Exp. Ther.* **336 (1)**:234.

Fulga *et al.* (2001) SR beta coordinates signal sequence release from SRP with ribosome binding to the translocon. *EMBO J.* **20 (9)**:2338.

Legate *et al.* (2000) Nucleotide-dependent binding of the GTPase domain of the signal recognition particle receptor betasubunit to the alpha-subunit. *J. Biol. Chem.* **275 (35)**:27439.

Sakash *et al.* (2000) The use of nucleotide analogs to evaluate the mechanism of the heterotropic response of Escherichia coli aspartate transcarbamoylase. *Protein Sci.* **9 (1)**:53.

Hwang *et al.* (1999) Structure-based identification of a novel NTPase from Methanococcus jannaschii. *Nat. Struct. Biol.* **6 (7)**:691.

Muraoka *et al.* (1999) Effects of purinenucleotide analogues on microtubule assembly. *Cell Struct. Funct.* **24 (5)**:305.

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.

Yu *et al.* (1997) Characterization of a Go alpha mutant that binds xanthine nucleotides. *J. Biol. Chem.* **272 (29)**:18015.

Rybin *et al.* (1996) GTPase activity of Rab5 acts as a timer for endocytic membrane fusion. *Nature* **383 (6597)**:266.

Powers *et al.* (1995) Reciprocal stimulation of GTP hydrolysis by 2 directly interacting GTPases. *Science* **269 (5229)**:1422.