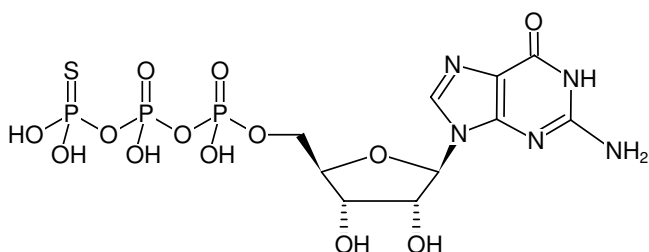


**GTPyS**

Guanosine-5'-(γ-thio)-triphosphate, Tetralithium salt
 Guanosine-5'-(3-thio)-triphosphate, Guanosine-5'-(3-thiotriphosphate)

Cat. No.	Amount
NU-412-2	2 mg
NU-412-10	10 mg
NU-412-20	20 mg



Structural formula of GTPyS

For general laboratory use.**Shipping:** shipped on dry ice**Storage Conditions:** store at -20 °C**Shelf Life:** 6 months after date of delivery**Molecular Formula:** C₁₀H₁₆N₅O₁₃P₃S (free acid)**Molecular Weight:** 539.25 g/mol (free acid)**Exact Mass:** 538.97 g/mol (free acid)**CAS#:** 94825-44-2**Purity:** ≥ 90 % (HPLC),
contains < 10 % GDP (HPLC)**Form:** solid**Color:** white to off-white**Spectroscopic Properties:** λ_{max} 252 nm, ε 13.7 L mmol⁻¹ cm⁻¹ (Tris-HCl pH 7.5)**Applications:**Functional assay for GPCRs^[1, 2]Binding assay^[3]**Specific Ligands:**Heterotrimeric and monomeric G-proteins^[4]Phosphodiesterase PDE-6^[5]for P2Y-like receptor^[6] and for P2Y₁₃ receptor^[7]

Please note: For reasons of stability, please make sure that the pH value of a solution of this product never drops below 7.0. This can be achieved by dissolving the nucleotide in a buffer of your choice (50 - 100 mM, pH 7 - 10). Dissolve and adjust concentration photometrically.

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[4] Koval *et al.* (2010) Europium-labeled GTP as a general nonradioactive substitute for [35S]GTPyS in high-throughput G-protein studies. *Analytical Biochem.* **397**:202.

[5] Yamazaki *et al.* (2010) Mechanism for the regulation of mammalian cGMP phosphodiesterase 6. 2: Isolation and characterization of the transducin-activated form. *Mol. Cell. Biochem.* **339**:235.

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[7] Marteau *et al.* (2003) Pharmacological characterization of human P2Y₁₃ receptor. *Mol. Pharmacol.* **64** (1):104.

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**GTPγS**

Guanosine-5'-(γ-thio)-triphosphate, Tetralithium salt
Guanosine-5'-(3-thio)-triphosphate, Guanosine-5'-(3-thiotriphosphate)

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