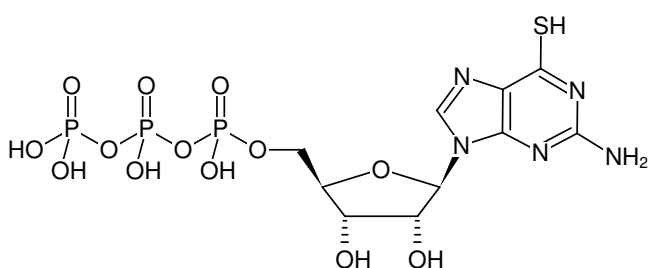


**6-Thio-GTP**

6-Thio-guanosine-5'-triphosphate, Sodium salt

Cat. No.	Amount
NU-1106S	150 µl (10 mM)
NU-1106L	5 x 150 µl (10 mM)



Structural formula of 6-Thio-GTP

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:** C₁₀H₁₆N₅O₁₃P₃S (free acid)**Molecular Weight:** 539.24 g/mol (free acid)**Exact Mass:** 538.97 g/mol (free acid)**CAS#:** 17670-19-8**Purity:** ≥ 95 % (HPLC)**Form:** solution in water**Color:** colorless to slightly yellow**Concentration:** 10 mM - 11 mM**pH:** 7.5 ±0.5**Spectroscopic Properties:** λ_{max} 257 nm, ε 8.8 L mmol⁻¹ cm⁻¹ (Tris-HCl pH 7.5), λ_{max} 342 nm, ε 24.8 L mmol⁻¹ cm⁻¹ (Tris-HCl pH 7.5)**Applications:**Allosteric effect on E.coli CTP-synthase^[1]Inhibition of Vac-1-Rac signalling^[2]Immunosuppression by blockade of GTPase activation^[3, 4]Immunosuppressive drug (transplantation, inflammation)^[1, 4]**Selected References:**

[1] Lunn *et al.* (2008) Structural requirements for the activation of Escherichia coli CTP synthase by the allosteric effector GTP are stringent, but requirements for inhibition are lax. *J. Biol. Chem.* **283**:2010.

[2] Wang *et al.* (2007) Enhanced cardiac allograft survival by Vav1-Rac signaling blockade in a mouse model. *Transplant Immunology* **18**:53.

[3] Poppe *et al.* (2005) Azothioprine suppresses Ezrin-Radixin-Moesin-dependent T cell-APC conjugation through inhibition of Vav Guanosine exchange activity on Rac proteins. *J. Immunology* **176**:640.

[4] Tiede *et al.* (2003) CD28-dependent Rac1 activation is the molecular target of azathioprine in primary human CD4⁺ lymphocytes. *J. Clinical Investigation* **111**:1133.

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