# PRODUCT INFORMATION

## Uridine-5’-O-(3-thiotriphosphate) (sodium salt)

*Item No. 38692*

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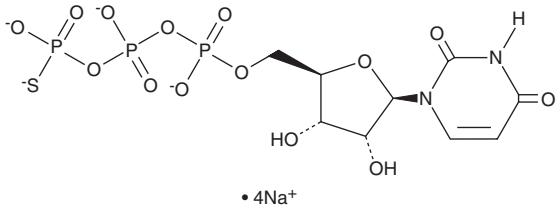
| **Formal Name:** | uridine 5′-(trihydrogen diphosphate), P′-anhydride with phosphorothioic acid, tetrasodium salt |
| **Synonym:** | UTP-γ-S |
| **MF:** | $C_9H_{11}N_2O_{14}P_3S \bullet 4Na$ |
| **FW:** | 588.1 |
| **Purity:** | ≥95% |
| **Supplied as:** | A solution in water |
| **Storage:** | -80°C |
| **Stability:** | ≥2 years |




*Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.*

### Description

Uridine-5’-O-(3-thiotriphosphate) (UTP-γ-S) is a hydrolysis-resistant derivative of UTP (Item No. 9003530) an agonist of the purinergic $P2Y_2$ receptor.[1] It induces inositol phosphate formation in 1321N1 astrocytoma cells expressing the human $P2Y_2$ receptor ($EC_{50}$ = 240 nM) and chloride secretion in primary nasal epithelial cells from patients with cystic fibrosis in a concentration-dependent manner. UTP-γ-S induces vasoconstriction in isolated human coronary arteries ($EC_{50}$ = 25.1 µM).[2]

### References


1. Lazarowski, E.R., Watt, W.C., Stutts, M.J., *et al.* Enzymatic synthesis of UTPγS, a potent hydrolysis resistant agonist of P2U-purinoceptors. *Br. J. Pharmacol.* **117(1)**, 203-209 (1996).
2. Malmsjö, M., Hou, M., Harden, T.K., *et al.* Characterization of contractile P2 receptors in human coronary arteries by use of the stable pyrimidines uridine 5’-*O*-thiodiphosphate and uridine 5’-*O*-3-thiotriphosphate. *J. Pharmacol. Exp. Ther.* **293(3)**, 755-760 (2000).





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