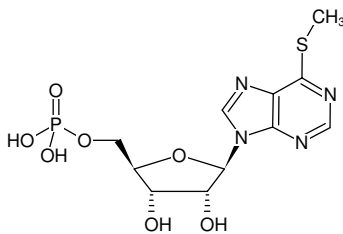




6-Methylthio-IMP

6-Methylthioinosine-5'-monophosphate, Triethylammonium salt
 6-Methylmercapto-9-(β-D-ribofuranosyl)purine-5'-monophosphate

Cat. No.	Amount
NU-1131S	150 µl (10 mM)
NU-1131L	5 x 150 µl (10 mM)



Structural formula of 6-Methylthio-IMP

For general laboratory use.

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: C₁₁H₁₅N₄O₇PS (free acid)

Molecular Weight: 378.29 g/mol (free acid)

Exact Mass: 378.04 g/mol (free acid)

CAS#: 7021-52-5

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} 224/292 nm, ε 11.5/19.0 L mmol⁻¹ cm⁻¹
 (Tris-HCl pH 7.5)

Applications:

Catabolism by purine-5'-nucleotidase^[1]

Transport by multidrug resistance proteins MRP4 and MRP5^[2]

Strong inhibitor of purine synthesis de novo^[3]

Selected References:

[1] Brouwer *et al.* (2005) Role of 5'-nucleotidase in thiopurine metabolism: Enzyme kinetic profile and association with thio-GMP levels in patients with acute lymphoblastic leukemia during 6-mercaptopurine treatment. *Clinica Chimica Acta* **361**:95.

[2] Wielinga *et al.* (2002) Thiopurine metabolism and identification of the thiopurine metabolites transported by MRP4 and MRP5 overexpressed in human embryonic kidney cells. *Molecular Pharmacology* **62**:1321.

[3] Stet *et al.* (1994) Decrease of S-adenosylmethionine synthesis by 6-mercaptopurine ribonucleoside in Molt F4 human malignant lymphoblasts. *Biochemical J.* **304**:163.

Lavi *et al.* (1985) A rapid and sensitive high-performance liquid chromatographic assay for 6-mercaptopurine metabolites in red blood cells. *Anal. Biochem.* **144** (2):514.