

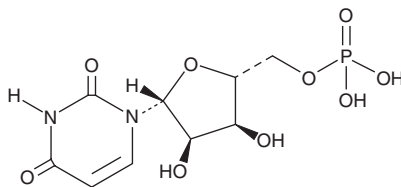
PRODUCT INFORMATION



Uridine-5'-monophosphate

Item No. 35382

CAS Registry No.: 58-97-9
Formal Name: 5'-uridylic acid
Synonyms: UMP, 5'-UMP
MF: $C_9H_{13}N_2O_9P$
FW: 324.18
Purity: $\geq 95\%$
UV/Vis.: λ_{max} : 262 nm
Supplied as: A solid
Storage: -20°C
Stability: ≥ 4 years



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

Laboratory Procedures

Uridine-5'-monophosphate is supplied as a solid. A stock solution may be made by dissolving the uridine-5'-monophosphate in the solvent of choice, which should be purged with an inert gas. Uridine-5'-monophosphate is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of uridine-5'-monophosphate in these solvents is approximately 15, 10, and 5 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of uridine-5'-monophosphate can be prepared by directly dissolving the solid in aqueous buffers. The solubility of uridine-5'-monophosphate in PBS (pH 7.2) is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Uridine-5'-monophosphate is a ribonucleotide.¹ It is formed *via* decarboxylation of orotidine-5'-monophosphate (5'-OMP) by OMP decarboxylase. Uridine-5'-monophosphate is further phosphorylated by UMP-CMP kinase to form UDP (Item No. 18137) and UTP (Item No. 9003530) during nucleic acid biosynthesis. Formulations containing uridine-5'-monophosphate have been used as dietary supplements.

Reference

1. Berg, J.M., Tymoczko, J.L., and Stryer, L. Nucleotide Biosynthesis. *Biochemistry*. 5th edition, W.H. Freeman (2002).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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