

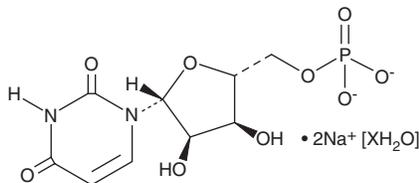
# PRODUCT INFORMATION



## Uridine-5'-monophosphate (sodium salt hydrate)

Item No. 34525

**CAS Registry No.:** 681435-27-8  
**Formal Name:** 5'-uridylic acid, disodium salt, hydrate  
**Synonyms:** UMP, 5'-UMP, 5'-Uridylic Acid  
**MF:**  $C_9H_{11}N_2O_9P \cdot 2Na [XH_2O]$   
**FW:** 368.1  
**Purity:**  $\geq 98\%$   
**UV/Vis.:**  $\lambda_{max}$ : 263 nm  
**Supplied as:** A solid  
**Storage:**  $-20^\circ C$   
**Stability:**  $\geq 4$  years



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

### Laboratory Procedures

Uridine-5'-monophosphate (UMP) (sodium salt hydrate) is supplied as a solid. Aqueous solutions of UMP (sodium salt hydrate) can be prepared by directly dissolving the solid in aqueous buffers. The solubility of UMP (sodium salt hydrate) in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

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

### Reference

1. Berg, J.M., Tymoczko, J.L., and Stryer, L. Nucleotide Biosynthesis. *Biochemistry*. 5<sup>th</sup> ed., 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.

#### WARRANTY AND LIMITATION OF REMEDY

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