Product Data Sheet

Orotidine 5'-monophosphate trisodium

Cat. No.: HY-N8060A **CAS No.:** 68244-58-6

Molecular Formula: $C_{10}H_{10}N_2Na_3O_{11}P$

Molecular Weight: 434.14

Target: Endogenous Metabolite; DNA/RNA Synthesis

Pathway: Metabolic Enzyme/Protease; Cell Cycle/DNA Damage

Storage: 4°C, sealed storage, away from moisture

* In solvent: -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)

BIOLOGICAL ACTIVITY

Description Orotidine 5'-monophosphate trisodium is a pyrimidine nucleotide. Orotidine 5'-monophosphate trisodium is synthesized

via the de novo synthesis pathway for DNA synthesis in a large number of microorganisms including M. tuberculosis, S. cerevisiae, S. typhimurium and P. falciparum to name a few. The synthesis of orotidine 5'-monophosphate trisodium uses phosphoribosyl pyrophosphate (PRPP) and orotic acid (OA) as the substrates catalyzed by orotate

phosphoribosyltransferase (OPRT)^[1].

IC₅₀ & Target Human Endogenous Metabolite

REFERENCES

 $[1]. Subrahmanyeswara\ Rao\ NN, et\ al.\ QM/MM\ reveals\ the\ sequence\ of\ substrate\ binding\ during\ OPRT\ action.\ Comput\ Biol\ Chem.\ 2018\ Jun; 74:31-38.$

Caution: Product has not been fully validated for medical applications. For research use only.

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