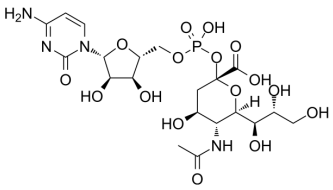
CMP-Sialic acid

Cat. No.:	HY-112942
CAS No.:	3063-71-6
Molecular Formula:	$C_{20}H_{31}N_4O_{16}P$
Molecular Weight:	614.45
Target:	Endogenous Metabolite
Pathway:	Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	CMP-Sialic acid (CMP-Neu5Ac) is an allosteric inhibitor of UDP-GlcNAc 2-epimerase. CMP-Sialic acid provides a substrate for Golgi sialyltransferases. CMP-Sialic acid is an important sugar nucleotide for biosynthesis of sialic acid and its conjugates[1].
IC_{50} & Target	Human Endogenous Metabolite
In Vitro	CMP-Sialic acid (22.5 μM, 45 min) can be used as a CMAH substrate to detect the formation of Neu5Gc in platelet lysates[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Mercado CP, et al. A serotonin-induced N-glycan switch regulates platelet aggregation. Sci Rep. 2013 Sep 30;3:2795.

[2]. Münster AK, et al. Mammalian cytidine 5'-monophosphate N-acetylneuraminic acid synthetase: a nuclear protein with evolutionarily conserved structural motifs. Proc Natl Acad Sci U S A. 1998 Aug 4;95(16):9140-5.

[3]. Jing Song, et al. Reassembled Biosynthetic Pathway for a Large-scale Synthesis of CMP-Neu5Ac. Mar Drugs. 2003 Dec; 1(4): 34-45.

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