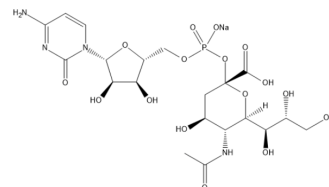


## CMP-Sialic acid sodium salt

Cat. No.:	HY-112942A
CAS No.:	1007117-62-5
Molecular Formula:	C <sub>20</sub> H <sub>30</sub> N <sub>4</sub> NaO <sub>16</sub> P
Molecular Weight:	636.43
Target:	Others; Endogenous Metabolite
Pathway:	Others; Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

Description	CMP-Sialic acid sodium salt (CMP-Neu5Ac sodium salt) is an allosteric inhibitor of UDP-GlcNAc 2-epimerase, the enzyme that initiates sialic acid synthesis. CMP-Sialic acid sodium salt provides a substrate for Golgi sialyltransferases <sup>[1]</sup> .
IC <sub>50</sub> & Target	Human Endogenous Metabolite
In Vitro	CMP-Sialic acid (CMP-Neu5Ac), the activated form of Neu5Ac, serves as the common activated sugar donor for all the sialyltransferases to transfer a single sialic acid to an acceptor or a growing oligosaccharide chain. CMP-Sialic acid is an important sugar nucleotide for biosynthesis of sialic acid and its conjugates <sup>[2]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### REFERENCES

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

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

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