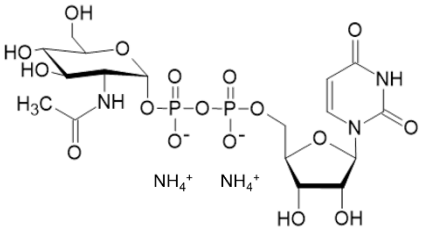
Last Update: Mar 17, 2026

Technical Product Information

Product Name	Uridine 5'-diphospho-*N*-acetylglucosamine ammonium salt
Synonyms	UDP-*N*-acetylglucosamine; UDP-GlcNAc
CAS No.	n/a
Related CAS No.	91183-98-1 (UDP-GlcNAc disodium salt)
Formula	$C_{17}H_{25}N_3O_{17}P_2 \cdot 2\ NH_4$
Molecular weight	641.38 g/mol
Structure	
Description	UDP-GlcNAc is a nucleotide sugar consisting of the nucleotide uridine 5'-diphosphate and a phosphate-bound monosaccharide, *N*-acetylglucosamine. Nucleotide sugars are the activated forms of monosaccharides required for cellular metabolism and biosynthesis reactions. UDP-GlcNAc serves as a donor substrate for *N*-acetylglucosaminyltransferases in the biosynthesis of N-acetylglucosamine-containing glycans and oligosaccharides.
Appearance	Lyophilized white powder
Purity	>90 % (HPLC-UV); Product is non-sterile and has not been tested for endotoxins.
Solubility	Soluble in water
Storage and shelf life	The product should be stored sealed and dry at -20°C. Shelf life has not been determined.
Special instructions	For research use only. Not for use in diagnostic procedures.
Toxicity & Safety	No health hazards have been reported so far. The general rules for handling chemicals apply. Avoid skin and eye contact or ingestion. Recommended is wearing of protective nitril gloves and eye protection. Avoid aerosol formation.
Selected References	Rexer, T.; Laaf, D.; Gottschalk, J.; Frohnmeyer, H.; Rapp, E.; Elling, L., Enzymatic Synthesis of Glycans and Glycoconjugates. In *Advances in Biochemical Engineering/Biotechnology*, **2021**; Vol. 175, pp 231-280. Mahour, R.; Klapproth, J.; Rexer, T. F. T.; Schildbach, A.; Klamt, S.; Pietzsch, M.; Rapp, E.; Reichl, U., Establishment of a five-enzyme cell-free cascade for the synthesis of uridine diphosphate N-acetylglucosamine. *J Biotechnol* **2018**, 283, 120-129.

eversyn GmbH, Magdeburg, Germany Phone: +49 391 6754 676 E-mail: info@eversyn.de Web: www.eversyn.de