

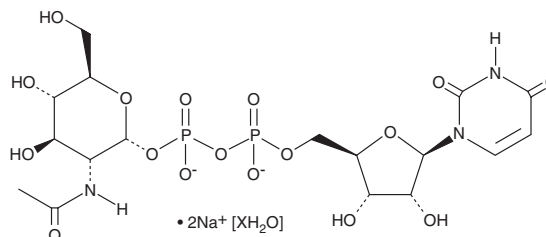
PRODUCT INFORMATION



UDP-N-acetyl-D-Glucosamine (sodium salt hydrate)

Item No. 20353

Formal Name:	uridine 5'-(trihydrogen diphosphate), P ¹ -[2-(acetylamino)-2-deoxy- α -D-glucopyranosyl] ester, disodium salt, hydrate
Synonyms:	UDPAG, UDP-GlcNAc, Uridine-5'-diphosphate-N-acetyl-D-Glucosamine
MF:	C ₁₇ H ₂₅ N ₃ O ₁₇ P ₂ • 2Na [XH ₂ O]
FW:	651.3
Purity:	≥95%
UV/Vis.:	λ_{max} : 262 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥4 years



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

Laboratory Procedures

UDP-N-acetyl-D-Glucosamine (sodium salt hydrate) is supplied as a crystalline solid. Aqueous solutions of UDP-N-acetyl-D-glucosamine (sodium salt hydrate) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of UDP-N-acetyl-D-glucosamine (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

UDP-N-acetyl-D-Glucosamine is a natural nucleotide sugar that is used by glycosyltransferases to transfer N-acetyl-D-glucosamine (Item No. 13136) residues to substrates.¹ It is an important component of antibiotic biosynthesis pathways in fungi and lipopolysaccharide production in bacteria.^{2,3}

References

1. Roseman, S. Reflections on glycobiology. *J. Biol. Chem.* **276(45)**, 41527-41542 (2001).
2. Kudo, F. and Eguchi, T. Biosynthetic genes for aminoglycoside antibiotics. *J. Antibiot. (Tokyo)* **62(9)**, 471-481 (2009).
3. Mulrooney, E.F., Poon, K.K., McNally, D.J., et al. Biosynthesis of UDP-N-acetyl-L-fucosamine, a precursor to the biosynthesis of lipopolysaccharide in *Pseudomonas aeruginosa* serotype O11. *J. Biol. Chem.* **280(20)**, 19535-19542 (2005).

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.

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