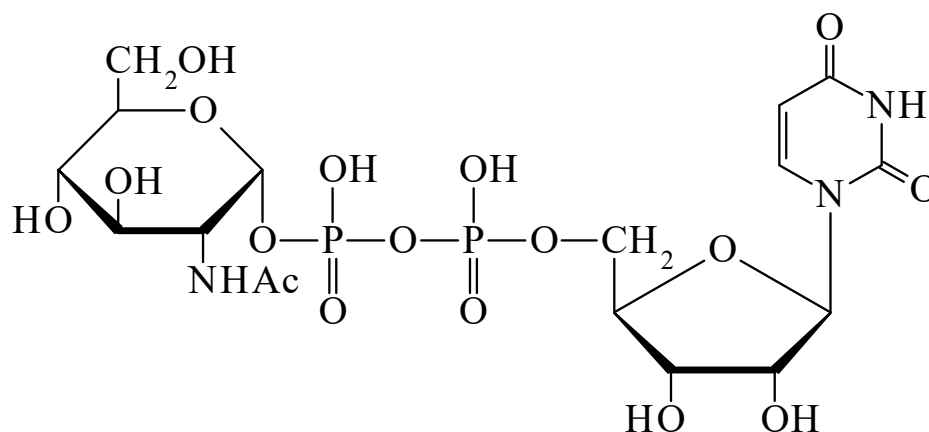




>>Entry Name: Uridine diphosphate acetylglucosamine

Synonym(s): Uridine 5'-(trihydrogen diphosphate) mono[2-(acetylamino)-2-deoxy- α -D-glucopyranosyl] ester, 9Cl. Uridine pyrophosphate acetylglucosamine. UDPX. UDPAG



CAS Registry Number: 528-04-1

Related CAS Registry Numbers(s): 91183-98-1

Molecular Formula: C₁₇H₂₇N₃O₁₇P₂

Molecular Weight: 607.358

Accurate Mass: 607.081576

Percentage Composition: C 33.62%; H 4.48%; N 6.92%; O 44.78%; P 10.20%

Source/Synthesis: Isol. from yeasts, plants and liver

Use/Importance: An intermed. in glycoprotein and mucopolysaccharide biosynth.

>>Derivative: 4'-Epimer

Synonym(s): Uridine diphosphate acetylgalactosamine

CAS Registry Number: 7277-98-7

Molecular Formula: C₁₇H₂₇N₃O₁₇P₂

Molecular Weight: 607.358

Accurate Mass: 607.081576

Percentage Composition: C 33.62%; H 4.48%; N 6.92%; O 44.78%; P 10.20%

Use/Importance: Intermed. in glycoprotein and mucopolysaccharide biosynth.

Physical Description: Powder

Optical Rotation: [α]_D²⁵ +81.7 (c, 0.8 in H₂O)

References:

Cabib, E. *et al.*, *J. Biol. Chem.*, 1953, **203**, 1055, (*isol, struct*)

Kurtz, E. *et al.*, *Biochim. Biophys. Acta*, 1961, **46**, 595, (*isol*)

Roseman, S. *et al.*, *J.A.C.S.*, 1961, **83**, 659, (*synth*)

Carlson, D.M. *et al.*, *Biochemistry*, 1964, **3**, 402-405, (*galactosyl*)

Konoshin, O. *et al.*, *Biochem. Biophys. Res. Commun.*, 1966, **25**, 239, (*pmr*)

Wagner, R.R. *et al.*, *Anal. Biochem.*, 1968, **25**, 572, (*synth*)

Maley, F. *et al.*, *Biochem. Biophys. Res. Commun.*, 1970, **39**, 371-378, (*galactosyl*)

Piller, F. *et al.*, *Anal. Biochem.*, 1982, **127**, 171-177, (*galactosyl*)