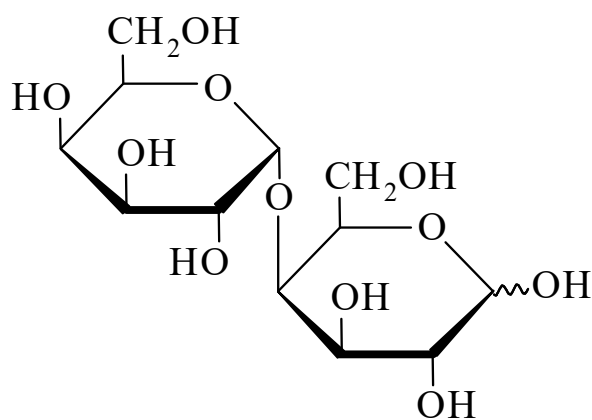




>>Entry Name: 4-*O*- α -D-Galactopyranosyl-D-galactose, 9Cl, 8Cl

Synonym(s): Galabiose. Urobiose



CAS Registry Number: 13117-26-5

Molecular Formula: C₁₂H₂₂O₁₁

Molecular Weight: 342.299

Accurate Mass: 342.116215

Percentage Composition: C 42.11%; H 6.48%; O 51.42%

Biological Source: The terminal disaccharide of the ceramide trihexoside isol. from normal human kidney and erythrocytes; a degradn. prod. of mucilage from common okra (*Hibiscus esculentus*); formed by the action of β -galactosidase on D-galactose

Use/Importance: The simplest structural unit capable of bacterial fimbriae binding associated with initiation of bacterial infections

Physical Description: Cryst. (MeOH/1-butanol/H₂O)

Melting Point: Mp 212-213°

Optical Rotation: $[\alpha]_D^{26} +170$ (c, 1.0 in H₂O)

>>Variant: α -Pyranose-form

Molecular Formula: C₁₂H₂₂O₁₁

Molecular Weight: 342.299

Accurate Mass: 342.116215

Percentage Composition: C 42.11%; H 6.48%; O 51.42%

>>Derivative: Octa-Ac

Molecular Formula: C₂₈H₃₈O₁₉

Molecular Weight: 678.597

Accurate Mass: 678.200735

Percentage Composition: C 49.56%; H 5.64%; O 44.80%

Physical Description: Cryst. (EtOH)

Melting Point: Mp 153-154°

Optical Rotation: $[\alpha]_D^{24} +138$ (c, 2.0 in CHCl₃)

References:

Whistler, R.L. *et al.*, *J.A.C.S.*, 1954, **76**, 1673, (*isol*)

Clancy, M.J. *et al.*, *Arch. Biochem. Biophys.*, 1967, **118**, 724

Chacón-Fuertes, M.E. *et al.*, *Carbohydr. Res.*, 1975, **43**, 51, (*synth*)

Dahmén, J. *et al.*, *Carbohydr. Res.*, 1983, **113**, 219, (*synth*)

Svensson, G. *et al.*, *Carbohydr. Res.*, 1986, **146**, 29, (*cryst struct*)

Frejd, T. *et al.*, *Carbohydr. Res.*, 1988, **176**, 253; 271, (*pmr, cmr, conformn, derivs*)

Mueller, D. *et al.*, *J.C.S. Perkin 1*, 1998, 2287-2294, (*synth*)