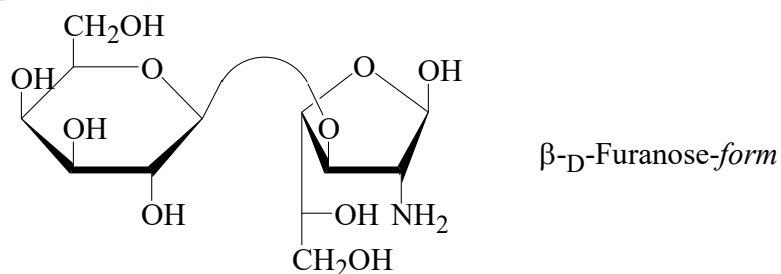




>>Entry Name: β -D-Galactopyranosyl-(1 $\rightarrow$ 3)-2-amino-2-deoxy-D-galactose

Synonym(s): 2-Amino-2-deoxy-3-O- β -D-galactopyranosyl-D-galactose



Molecular Formula: C₁₂H₂₃NO₁₀

Molecular Weight: 341.314

Accurate Mass: 341.132199

Percentage Composition: C 42.23%; H 6.79%; N 4.10%; O 46.88%

>>Derivative: *N*-Ac

Synonym(s): 2-Acetamido-2-deoxy-3-O- β -D-galactopyranosyl-D-galactose. β -D-Galactopyranosyl-(1 $\rightarrow$ 3)-2-acetamido-2-deoxy-D-galactose

CAS Registry Number: 3554-90-3

Molecular Formula: C₁₄H₂₅NO₁₁

Molecular Weight: 383.352

Accurate Mass: 383.142764

Percentage Composition: C 43.86%; H 6.57%; N 3.65%; O 45.91%

Source/Synthesis: Isol. from the acid hydrolysate of human blood group A, B, H and Le substances

Use/Importance: TF-antigenic disaccharide (Thomsen-Friedenreich)

Optical Rotation: $[\alpha]_D^{35} +34.5$ (c, 0.3 in H₂O)

>>Derivative: Me glycoside, 5,6-*O*-isopropylidene, *N*-Ac

CAS Registry Number: 139747-11-8

Molecular Formula: C₁₈H₃₁NO₁₁

Molecular Weight: 437.443

Accurate Mass: 437.189714

Percentage Composition: C 49.42%; H 7.14%; N 3.20%; O 40.23%

Optical Rotation: $[\alpha]_D^{35} -57.3$ (c, 2.48 in H₂O)

References:

- Painter, T.J. *et al.*, *Chem. Ind. (London)*, 1962, 1535-1536, (*N*-Ac, isol)
Flowers, H.M. *et al.*, *J.O.C.*, 1965, **30**, 2041-2043, (*N*-Ac, synth)
Springer, G.F. *et al.*, *Naturwissenschaften*, 1974, **61**, 457, (*biochem*)
Ghosh, R. *et al.*, *J. Carbohydr. Chem.*, 1992, **11**, 71-75, (*N*-Ac deriv, synth, pmr)