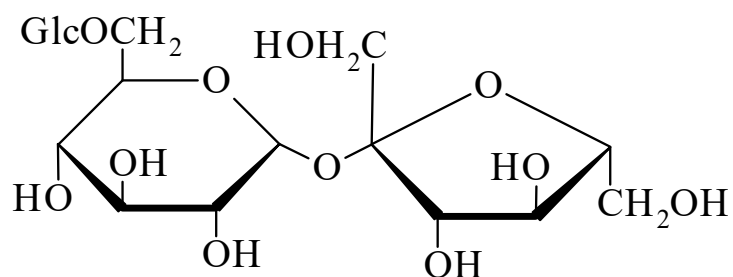




>>Entry Name: Gentianose

Synonym(s): β -D-Fructofuranosyl O- β -D-glucopyranosyl-(1 $\rightarrow$ 6)- α -D-glucopyranoside, 9Cl, 8Cl. β -D-Glucopyranosyl-(1 $\rightarrow$ 6)- α -D-glucopyranosyl-(1 $\rightarrow$ 2)- β -D-fructofuranoside



CAS Registry Number: 25954-44-3

Molecular Formula: $C_{18}H_{32}O_{16}$

Molecular Weight: 504.441

Accurate Mass: 504.16904

Percentage Composition: C 42.86%; H 6.39%; O 50.75%

Biological Source: Occurs in roots of various spp. of gentian, (*Gentiana lutea*, *Gentiana purpurea*, *Gentiana asclepiadea*, *Gentiana punctata*, *Gentiana cruciata*). Formed by the action of levansucrase on 6-O- β -D-Glucopyranosyl-D-glucose [CPD88-P](#) and Sucrose [BTP29-X](#)

Melting Point: Mp 212°

Optical Rotation: $[\alpha]_D^{25} +30.8$ (c, 0.5 in H_2O)

>>Derivative: Undeca-Ac

Melting Point: Mp 80-93°

Optical Rotation: $[\alpha]_D^{20} +32.2$ (c, 0.85 in $CHCl_3$)

References:

Haworth, W.N. *et al.*, *J.C.S.*, 1923, 3120

Suami, T. *et al.*, *Carbohydr. Res.*, 1972, **21**, 451, (*synth, pmr*)

Samuelson, O., *Methods Carbohydr. Chem.*, 1972, **6**, 66, (*chromatog*)