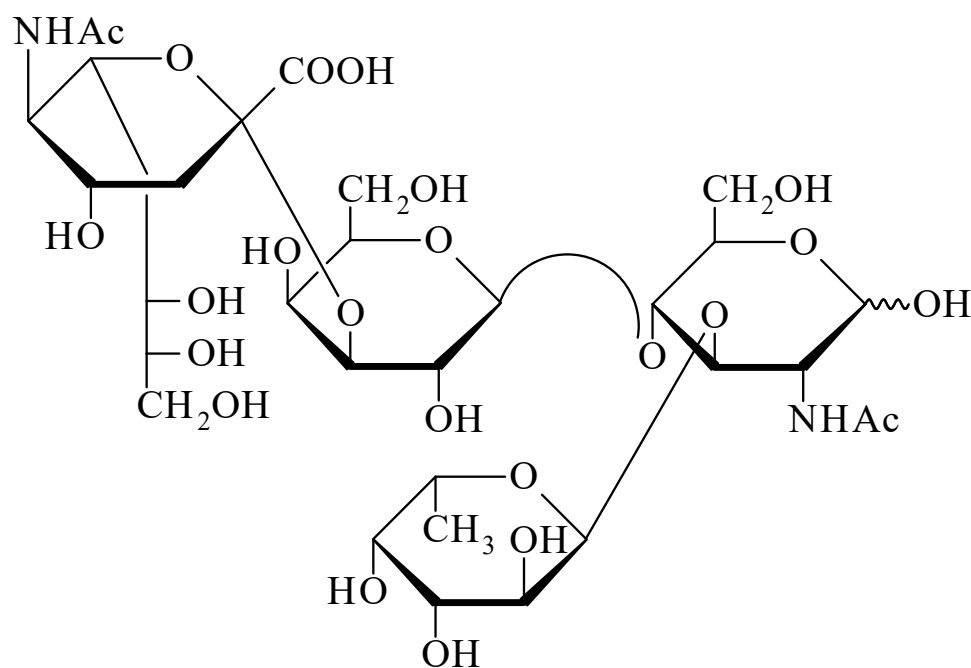




>>Entry Name: Sialyl-Lewis x tetrasaccharide

Synonym(s): α -(N-Acetylneuraminosyl-(2 $\rightarrow$ 3)- β -D-galactopyranosyl)-(1 $\rightarrow$ 4)-[α -L-fucopyranosyl-(1 $\rightarrow$ 3)]-2-acetamido-2-deoxy-D-glucose. S Le^x



CAS Registry Number: 98603-84-0

Extra CAS Registry Numbers(s): 136514-66-4 136599-51-4

Molecular Formula: C₃₁H₅₂N₂O₂₃

Molecular Weight: 820.751

Accurate Mass: 820.296093

Percentage Composition: C 45.37%; H 6.39%; N 3.41%; O 44.84%

Biological Source: Present at the terminus of glycolipids attached to the surface of white blood cells

Use/Importance: Ligand for cell surface receptors of selectins. Plays an important role in inflammatory response by mediating the binding of the leukocytes to the injured tissue. The mucins in the sera of patients with certain cancers exhibit high levels

Physical Description: Solid

Optical Rotation: $[\alpha]_D^{25} +5.8$ (c, 0.24 in MeOH)

Other Data: Opt. rotn. refers to anomeric mixture (α : β 3:2)

References:

- Nicolaou, C. *et al.*, *Chem. Comm.*, 1991, 870-872, (*synth*, *pmr*)
Ichikawa, Y. *et al.*, *J.A.C.S.*, 1992, **114**, 9283-9298, (*synth*, *pmr*, *cmr*)
de Vries, T. *et al.*, *FEBS Lett.*, 1993, **330**, 243-248, (*synth*, *pmr*)
Ichikawa, Y. *et al.*, *Chem. Br.*, 1994, 117, (*rev*)
Schuster, M. *et al.*, *J.A.C.S.*, 1994, **116**, 1135, (*synth*)
Dekany, G. *et al.*, *J. Carbohydr. Chem.*, 1997, **16**, 983-999, (*synth*, *pmr*, *ms*)
Baba, K. *et al.*, *Biosci., Biotechnol., Biochem.*, 1998, **62**, 590-592, (*synth*)