PRODUCT INFORMATION



6-deoxy-L-Talose

Item No. 20911

CAS Registry No.: 7658-10-8 Pneumose Synonym: MF: $C_6H_{12}O_5$ FW: **Purity:** ≥95% Supplied as: A solid -20°C Storage: Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

6-deoxy-L-Talose is supplied as a solid. A stock solution may be made by dissolving the 6-deoxy-L-talose in the solvent of choice, which should be purged with an inert gas. 6-deoxy-L-Talose is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of 6-deoxy-L-talose in these solvents is approximately 20 and 10 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of 6-deoxy-L-talose can be prepared by directly dissolving the solid in aqueous buffers. The solubility of 6-deoxy-L-talose in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

6-deoxy-L-Talose is a microbial monosaccharide that has been found in the cell wall of bacteria such as S. bovis and in the O-specific polysaccharide of LPS in species including E. coli and P. maltophilia. 1-3 It is also a component of the surface glycopeptidolipids of M. avium.⁴

References

- 1. Pazur, J.H., Kane, J.A., Dropkin, D.J., et al. Glycans from streptococcal cell walls: An antigenic triheteroglycan of 6-deoxy-L-talose, L-rhamnose and D-galactose from Streptococcus bovis. Arch. Biochem. Biophys. 150(2), 382-391 (1972).
- 2. Jann, B., Shashkov, A., Torgov, V., et al. NMR investigation of the 6-deoxy-L-talose-containing O45, O45-related (O45rel), and O66 polysaccharides of Escherichia coli. Carbohydr. Res. 278(1), 155-165 (1995).
- 3. Wilkinson, S.G., Galbraith, L., and Anderton, W.J. Lipopolysaccharides from Pseudomonas maltophilia: Composition of the lipopolysaccharide and structure of the side-chain polysaccharide from strain N.C.I.B. 9204. Carbohydr. Res. 112(2), 241-252 (1983).
- 4. Sweet, L., Zhang, W., Torres-Fewell, H., et al. Mycobacterium avium glycopeptidolipids require specific acetylation and methylation patterns for signaling through toll-like receptor 2. J. Biol. Chem. 283(48), 33221-33231 (2008).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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