

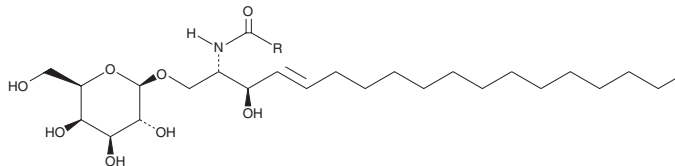
PRODUCT INFORMATION



Galactosylceramide (bovine spinal cord)

Item No. 24322

CAS Registry No.: 85305-88-0
Formal Name: 1-O-β-D-galactopyranosyl-ceramide
Synonyms: Cerebroside, Galactosylcerebroside, GL1b
MF: C₄₈H₉₃NO₉ (for 2-hydroxy Tetracosanoyl)
FW: 828.0
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

Galactosylceramide (bovine spinal cord) is supplied as a solid. A stock solution may be made by dissolving the galactosylceramide (bovine spinal cord) in the solvent of choice, which should be purged with an inert gas. Galactosylceramide (bovine spinal cord) is soluble in a 2:1 solution of chloroform:methanol.

Description

Galactosylceramides are glycosphingolipids that contain galactose attached to a ceramide containing an N-acyl hydroxy or non-hydroxy fatty acid. They are metabolic precursors to sulfatide (Item No. 24323), found primarily in nerve tissues, and are the main glycosphingolipids in the central nervous system.^{1,2} Galactosylceramides are involved in a multitude of cellular processes including cell agglutination, cellular signaling in glycosynapses, cellular development, and activation of T cells.¹⁻³ They accumulate in a globoid cell in the brain of patients with Krabbe disease, a disorder characterized by a deficiency in galactosylceramides activity.² This product contains galactosylceramide molecular species with primarily C24:1, 2-hydroxy C18:0, and 2-hydroxy C24:0 fatty acyl chains. As this product is derived from a natural source, there may be variations in the sphingoid backbone.

References

1. Boggs, J.M., Gao, W., Zhao, J., *et al.* Participation of galactosylceramide and sulfatide in glycosynapses between oligodendrocyte or myelin membranes. *FEBS Lett.* **584(9)**, 1771-1778 (2010).
2. Wenger, D.A., Rafi, M.A., and Luzzi, P. Krabbe disease: One hundred years from the bedside to the bench to the bedside. *J. Neurosci. Res.* **94(11)**, 982-989 (2016).
3. Birkholz, A.M., Howell, A.R., and Kronenberg, M. The α and Ω of galactosylceramides in T cell immune function. *J. Biol. Chem.* **290(25)**, 15365-15370 (2015).

WARNING

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

SAFETY DATA

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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