

# Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten! See the following pages for more information!



# Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

# Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

# SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

linkedin.com/company/szaboscandic in



# 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 C<sub>48</sub>H<sub>93</sub>NO<sub>9</sub> (for 2-hydroxy Tetracosanoyl) MF:

FW: 828.0 **Purity:** ≥98% A solid Supplied as: 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.<sup>1,2</sup> 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.<sup>2</sup> 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 Luzi, 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  $\alpha$  and  $\Omega$  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.

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.

#### WARRANTY AND LIMITATION OF REMEDY

subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website

Copyright Cayman Chemical Company, 03/14/2024

## **CAYMAN CHEMICAL**

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.**CAYMANCHEM**.COM