



SZABO SCANDIC

Part of Europa Biosite

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

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PRODUCT INFORMATION



Spingolipid Mixture (bovine)

Item No. 29375

Supplied as: A solution in chloroform:methanol (2:1)

Storage: -20°C

Stability: ≥1 year

Concentration: 25 mg/ml

Special Conditions: This standard is accurately prepared by gravimetric technique (+/-0.5%)

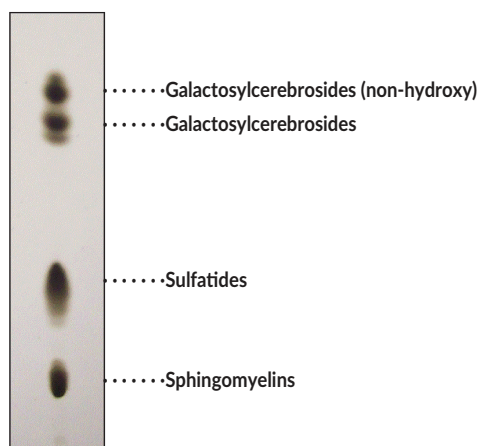
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Description and Data

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 sulfatides, 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 globoid cells in the brain of patients with Krabbe disease, a disorder characterized by a deficiency in galactosylcerebrosidase activity.² Sulfatides are primarily found in the myelin sheath of oligodendrocytes and Schwann cells, with smaller chain lengths predominant during development and longer chain lengths predominant in mature cells.⁴ They accumulate in the lysosome of patients with metachromatic leukodystrophy, a disorder characterized by arylsulfatase A deficiency.^{5,6} Sphingomyelins are bioactive sphingolipids found in mammalian cell membranes.⁷ They make up 2-15% of the total organ phospholipid population but are found at higher concentrations in the brain and myelin sheaths surrounding peripheral nerves. Spingolipid Mixture contains bovine hydroxy- and non-hydroxy galactosylcerebrosides, sulfatides, and sphingomyelins. It is intended for use as a reference standard for the identification of these lipids in various sample types by TLC, LC-, or GC-MS.

Included are:

Elution Order*	Item Name
1	Galactosylcerebrosides (non-hydroxy)
2	Galactosylcerebrosides
3	Sulfatides
4	Sphingomyelins



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.

WARRANTY AND LIMITATION OF REMEDY

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

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PRODUCT INFORMATION



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).
4. Svennerholm, L. and Ställberg-Stenhagen, S. Changes in the fatty acid composition of cerebrosides and sulfatides of human nervous tissue with age. *J. Lipid Res.* **9(2)**, 215-225 (1968).
5. Saville, J.T., Smith, N.J.C., Fletcher, J.M., *et al.* Quantification of plasma sulfatides by mass spectrometry: Utility for metachromatic leukodystrophy. *Anal. Chim. Acta* **955**, 79-85 (2017).
6. Takahashi, T. and Suzuki, T. Role of sulfatide in normal and pathological cells and tissues. *J. Lipid Res.* **53(8)**, 1437-1450 (2012).
7. Slotte, J.P. and Ramstedt, B. The functional role of sphingomyelin in cell membranes. *Eur. J. Lipid Sci. Technol.* **109(10)**, 977-981 (2007).

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