

PRODUCT INFORMATION



Monosialoganglioside Mixture

Item No. 29359

Supplied as: A solution in chloroform:methanol:water (2:1:0.1)

Storage: -20°C

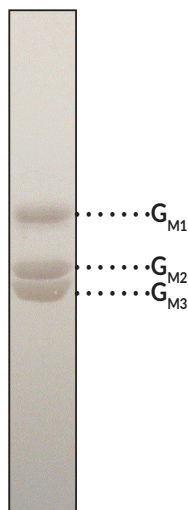
Stability: ≥2 years

Concentration: 0.5 mg/ml

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

Description and Data

Monosialogangliosides are membrane sphingolipids that contain one sialic acid residue.¹ They have roles in cell proliferation, differentiation, and adhesion, as well as neuronal plasticity and repair.¹⁻³ Monosialogangliosides accumulate in a variety of lysosomal storage disorders including Sandhoff, Tay-Sachs, and Niemann-pick diseases.^{4,5} Monosialoganglioside Mixture contains the monosialogangliosides G_{M1} , G_{M2} , and G_{M3} and is intended for use as a reference standard for the detection of monosialogangliosides in a variety of sample types by TLC or LC-MS.



References

1. Kolter, T. Ganglioside biochemistry. *ISRN Biochem.* **2012:506160** (2012).
2. Mukherjee, P., Faber, A.C., Shelton, L.M., *et al.* Thematic review series: Sphingolipids. Ganglioside GM3 suppresses the proangiogenic effects of vascular endothelial growth factor and ganglioside GD1a. *J. Lipid Res.* **49(5)**, 929-938 (2008).
3. Seyfried, T.N. and Mukherjee, P. Ganglioside GM3 is antiangiogenic in malignant brain cancer. *J. Oncol.* **2010:961243** (2010)
4. Baek, R.C., Martin, D.R., Cox, N.R., *et al.* Comparative analysis of brain lipids in mice, cats, and humans with Sandhoff disease. *Lipids* **44(3)**, 197-205 (2009).
5. Walkley, S.U. Secondary accumulation of gangliosides in lysosomal storage disorders. *Semin. Cell Dev. Biol.* **15(4)**, 433-444 (2004).

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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