# PRODUCT INFORMATION



# Disialoganglioside Mixture

Item No. 29360

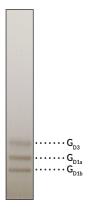
Supplied as: A solution in chloroform:methanol:water (2:1:0.1)

Storage: Stability: ≥1 year 500 μg/ml Concentration:

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

## **Description and Data**

Disialogangliosides are membrane sphingolipids that contain two sialic acid residues linked to a galactose moiety.<sup>1</sup> They have roles in cell proliferation, immune regulation, tumor cell invasion and metastasis, intra- and intercellular signaling, and neurogenesis. 1-5 Disialoganglioside Mixture contains the disialogangliosides  $G_{D1a}$ ,  $G_{D1b}$ , and  $G_{D3}$  and is intended for use as a reference standard for the detection of disialogangliosides in a variety of sample types by TLC, LC-, or GC-MS.



### References

- 1. 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).
- 2. Liang, S., Wang, M., Tapping, R.I., et al. Ganglioside GD1a is an essential coreceptor for Toll-like receptor 2 signaling in response to the B subunit of type IIb enterotoxin. J. Biol. Chem. 282(10), 7532-7542 (2007).
- 3. Kolter, T. Ganglioside biochemistry. ISRN Biochem. (2012).
- 4. De Maria, R., Lenti, L., Malisan, F., et al. Requirement for G<sub>D3</sub> ganglioside in CD95- and ceramide-induced apoptosis. Science 277(5332), 1652-1655 (1997).
- Wang, J., Cheng, A., Wakade, C., et al. Ganglioside GD3 is required for neurogenesis and long-term maintenance of neural stem cells in the postnatal mouse brain. J. Neurosci. 34(41), 13790-13800 (2014).

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

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# **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