# PRODUCT INFORMATION



## Ganglioside G<sub>D1b</sub> Polyclonal Antibody

Item No. 28642

#### **Overview and Properties**

Contents: This vial contains 100  $\mu$ l polyclonal antibody to ganglioside  $G_{M1}$ . Purified ganglioside G<sub>D1h</sub> and complete Freund's adjuvant Immunogen:

Form:

Storage: -20°C (as supplied)

Stability: ≥2 years Host: Rabbit Isotype: IgG/IgM

Applications: ELISA and TLC immunoblotting; the optimal working concentration/dilution should be

determined empirically.

### Description

Ganglioside G<sub>D1h</sub> (Item No. 19569) is an acidic glycosphingolipid that contains two sialic acid residues linked to an inner galactose unit. It is a component of plasma membranes where it packs densely with cholesterol to form lipid microdomains that modulate both intra- and intercellular signaling events. The concentration of ganglioside  $G_{D1b}$  in human brain increases with age, constituting 7.85% of total sialic acid in the brain of 0- to 10-year-old subjects and 20.29% in 11- to 30-year-old subjects.<sup>2</sup> Ganglioside G<sub>D1b</sub> levels are positively correlated with pilocytic astrocytoma tumor grade, and  $G_{D1b}$  has been detected in various other gliomas, including primitive neuroectodermal tumors, glioblastomas, and anaplastic astrocytomas.<sup>3</sup> Ganglioside  $\mathsf{G}_{\mathsf{D1b}}$  Polyclonal Antibody can be used for ELISA and TLC immunoblotting applications. [Matreya, LLC. Catalog No. 1964]

#### References

- 1. Kolter, T. Ganglioside biochemistry. ISRN Biochem. 506160 (2012).
- 2. Riboni, L., Sonnino, S., Acquotti, D., et al. Natural occurrence of ganglioside lactones. Isolation and characterization of G<sub>D1h</sub> inner ester from adult human brain. J. Biol. Chem. 261(18), 8514-8519 (1986).
- 3. Comas, T.C., Tai, T., Kimmel, D., et al. Immunohistochemical staining for ganglioside GD1b as a diagnostic and prognostic marker for primary human brain tumors. Neuro Oncol. 1(4), 261-267 (1999).

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.

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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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