Ganglioside GD3 (MB3.6): sc-33685

BACKGROUND
Gangliosides are membrane-bound, sialic acid-containing glycosphingolipids that play a significant role in determining the nature of tetraspanin interactions. Ganglioside GD3 is produced by the transfer of sialic acid from CMP-sialic acid to GM3. This reaction is catalyzed by the type II membrane protein GD3 Synthase. Ganglioside GD3 is known to be important for cell adhesion and growth of cultured malignant cells. It is found in most normal tissues, and its expression increases under pathological conditions and during development and aging processes. In malignant melanoma cells, Ganglioside GD3 is involved in the upregulation of tyrosine phosphorylation for p130 Cas and paxillin. Ganglioside GD3 also mediates apoptosis, functioning as a regulatory molecule and contributing to mitochondrial damage. The level of Ganglioside GD3 present in a cell plays a significant role in determining cell fate.

REFERENCES

SOURCE
Ganglioside GD3 (MB3.6) is a mouse monoclonal antibody raised against a human melanoma cell line.

PRODUCT
Each vial contains 200 µg IgG3 in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS
Ganglioside GD3 (MB3.6) is recommended for detection of Ganglioside GD3 of human origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10^6 cells).

RECOMMENDED SECONDARY REAGENTS
To ensure optimal results, the following support (secondary) reagents are recommended: 1) Immunofluorescence: use goat anti-mouse IgG-FITC: sc-2010 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-2781 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA
Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE
For research use only, not for use in diagnostic procedures.

PROTOCOLS
See our web site at www.scbt.com or our catalog for detailed protocols and support products.