

Ganglioside GD3 (2Q631): sc-71139

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

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SOURCE

Ganglioside GD3 (2Q631) is a mouse monoclonal antibody raised against a human melanoma cell line.

STORAGE

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

PRODUCT

Each vial contains 200 μ g IgG₃ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Ganglioside GD3 (2Q631) is available conjugated to either phycoerythrin (sc-71139 PE) or fluorescein (sc-71139 FITC), 200 μ g/ml, for IF, IHC(P) and FCM.

APPLICATIONS

Ganglioside GD3 (2Q631) 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 μ g per 1 x 10⁶ cells).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
 1) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

RESEARCH USE

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

PROTOCOLS

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