

# Ganglioside GD3 (4F6): sc-56112

## 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 (4F6) is a mouse monoclonal antibody raised against Ganglioside GD3.

## PRODUCT

Each vial contains 200  $\mu$ g IgG<sub>3</sub> in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

Ganglioside GD3 (4F6) is recommended for detection of Ganglioside GD3 by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500); may cross-react with 9-O-Ac-GD3 Ganglioside and GT1a Ganglioside.

## STORAGE

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](http://www.scbt.com) for detailed protocols and support products.