iGb3 (D-12): sc-168131



The Power to Question

BACKGROUND

IGb3 (isogloboside 3), also known as isoglobotrihexosylceramide, A3GALT2 (α 1,3-galactosyltransferase 2), A3GALT2P or IGBS3S (isoglobotriaosylceramide synthase), is a 370 amino acid protein that belongs to the glycosyltransferase 6 family. Involved in natural killer T cell development, iGb3 also synthesizes the galactose- α (1,3)-galactose group on α -galactose. Localizing to Golgi apparatus, IGb3 glycosylates lipids and binds manganese as a cofactor. The gene encoding iGb3 maps to human chromosome 1, which spans 260 million base pairs and contains over 3,000 genes. Human chromosome 1 comprises nearly 8% of the human genome and houses a large number of disease-associated genes, including those that are involved in familial adenomatous polyposis, Stickler syndrome, Parkinson's disease, Gaucher disease, schizophrenia and Usher syndrome.

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CHROMOSOMAL LOCATION

Genetic locus: A3galt2 (mouse) mapping to 4 D2.2.

SOURCE

iGb3 (D-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of iGb3 of mouse origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-168131 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

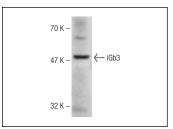
iGb3 (D-12) is recommended for detection of iGb3 of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for iGb3 siRNA (m): sc-146179, iGb3 shRNA Plasmid (m): sc-146179-SH and iGb3 shRNA (m) Lentiviral Particles: sc-146179-V.

Molecular Weight of iGb3: 43 kDa.

Positive Controls: mouse brain extract: sc-2253.

DATA



iGb3 (D-12): sc-168131. Western blot analysis of iGb3 expression in mouse brain tissue extract.

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 or our catalog for detailed protocols and support products.



Try **iGb3 (H-7): sc-514782**, our highly recommended monoclonal alternative to iGb3 (D-12).

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