

Anti-Protocadherin Gamma C3

Catalog# SMC-474D

Size: 100µg

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3825 Cadboro Bay Road,
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This product is for *in vitro* research use only and is not intended for use in humans or animals

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Product	Mouse anti-Protocadherin Gamma C3 antibody; monoclonal
Clone	S174B-27
Immunogen	Fusion protein amino acids 720-804 (variable cytoplasmic domain) of mouse Gamma-protocadherin-C3 (Accession no. Q91XX1) Human: 97% identity (83/85 amino acids identical) Rat: 97% identity (83/85 amino acids identical) No significant identity with other Gamma-protocadherin proteins
Host and Subclass	Mouse, IgG1
Cited Applications	WB, ICC
Specificity	Detects a 100 kDa protein.
Species cross-reactivity	Mouse
Format	Protein G purified. In PBS pH 7.4, 0.1% NaN ₃ and 50% glycerol.
Concentration and Working Dilution	1mg/ml; 1:1000 (WB)
Storage and stability	-20°C; 1 year+; shipped on cold packs or ambient

These gene clusters have an immunoglobulin-like organization, suggesting that a novel mechanism may be involved in their regulation and expression. The gamma gene cluster includes 22 genes divided into 3 subfamilies. Subfamily A contains 12 genes, subfamily B contains 7 genes and 2 pseudogenes, and the more distantly related subfamily C contains 3 genes. The tandem array of 22 large, variable region exons are followed by a constant region, containing 3 exons shared by all genes in the cluster. Each variable region exon encodes the extracellular region, which includes 6 cadherin ectodomains and a transmembrane region. The constant region exons encode the common cytoplasmic region. These neural cadherin-like cell adhesion proteins most likely play a critical role in the establishment and function of specific cell-cell connections in the brain. Alternative splicing has been described for the gamma cluster genes.

Certificate of Analysis

1µg/mL of SMC-474 was sufficient for detection of Protocadherin Gamma C3 in 20 µg of COS cell lysate (transiently transfected with GFP-tagged Protocadherin Gamma C3 plasmids) by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

Scientific Background

This gene is a member of the protocadherin gamma gene cluster, one of three related clusters tandemly linked on chromosome five. These gene clusters have an immunoglobulin-like organization, suggesting that a novel mechanism may be involved in their regulation and expression. PCDHGC3 is a potential calcium-dependent cell-adhesion protein. It may be involved in the establishment and maintenance of specific neuronal connections in the brain. This gene is a member of the protocadherin gamma gene cluster, one of three related clusters tandemly linked on chromosome five.

Material Safety Data Sheet

Anti- Protocadherin Gamma C3 (Monoclonal Antibody) SMC-474

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The below information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. StressMarq shall not be held liable for any damage resulting from handling or from contact with the above product. See the Technical Specification, Packing Slip, Invoice, and Product Catalogue for additional terms and conditions of sale.

Hazardous Ingredients

The physical, chemical and toxicological properties of these components have not been fully investigated. It is recommended that all laboratory personnel follow standard laboratory safety procedures when handling this product. Safety procedures should include wearing OSHA approved safety glasses, gloves and protective clothing. Direct physical contact with this product should be avoided.

Known Hazardous Components

None

CAS Number

Percent

Physical Data

This product consists of whole rabbit serum shipped on gel packs. The physical properties of this product have not been investigated thoroughly.

Fire and Explosion Hazard and Reactivity Data

NOT APPLICABLE

Toxicological Properties

May be harmful by inhalation, ingestion, or skin absorption. The toxicological properties of this product have not been investigated thoroughly. Exercise due caution.

Preventative Measures

Wear chemical safety goggles and compatible chemical-resistant gloves. Avoid inhalation, contact with eyes, skin or clothing.

Spill and Leak Procedures

Observe all federal, state and local environmental regulations.

- Wear protective equipment.
- Absorb on sand or vermiculite and place in closed containers for disposal.
- Dispose or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

First Aid Measures

- If swallowed, wash out mouth with water, provided person is conscious. Call a physician.
- In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. If a rash or other irritation develops, call a physician.
- If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.
- In case of eye contact, flush with copious amounts of water for at least 15 minutes while separating the eyelids with fingers. Call a physician.

Authorized: StressMarq Biosciences Inc.

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