

# Anti-Protocadherin Gamma A3

## Catalog# SMC-451D

Size: 100µg

PO Box 55036, Cadboro Bay  
3825 Cadboro Bay Road,  
Victoria, BC, V8N 4G0, Canada

This product is for *in vitro* research use only and is not intended for use in humans or animals

**StressMarq**  
Biosciences Inc.

Orders • [sales@stressmarq.com](mailto:sales@stressmarq.com)  
Tel: • +1 250 294 9065  
Fax: • +1 250 294 9025  
Email • [info@stressmarq.com](mailto:info@stressmarq.com)  
Web • [www.stressmarq.com](http://www.stressmarq.com)

Product	Mouse anti-Protocadherin Gamma A3 antibody; monoclonal
Clone	S144-17
Immunogen	Fusion protein amino acids 720-804 (variable cytoplasmic domain) of mouse Gamma-protocadherin-A3 (Accession no. Q91XY5) Human: 80% identity (68/84 amino acids identical) >75% identity with other Gamma-protocadherin-A protein.
Host and Subclass	Mouse, IgG1
Cited Applications	WB, ICC
Specificity	Detects a 100 kDa protein. No cross-reactivity against other Protocadherin Gamma -A, -B or -C proteins.
Species cross-reactivity	Mouse
Format	Protein G purified. In PBS pH 7.4, 0.1% NaN <sub>3</sub> 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

PCDHGA3 is a type I transmembrane receptor containing six cadherin motifs and is expressed in the central nervous system where it localizes to synapses. Members of the gamma cluster of protocadherins are essential for neuronal survival. There are two isoforms of PCDHGA3 that are produced as a result of alternative splicing events.

### Certificate of Analysis

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1µg/mL of SMC-451 was sufficient for detection of Protocadherin Gamma A3 in 20 µg of COS cell lysate (transiently transfected with GFP-tagged Protocadherin Gamma A3) by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.  
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### Scientific Background

Protocadherins are a large family of cadherin-like cell adhesion proteins that are involved in the establishment and maintenance of neuronal connections in the brain. There are three protocadherin (PCDH) gene clusters, designated alpha, beta and gamma, all of which contain multiple tandemly arranged genes. PCDHGA3 (Protocadherin gamma-A3) is a 932 amino acid that is one of 22 proteins encoded by the protocadherin gamma cluster. The protocadherin gamma cluster consists of three subfamilies (A, B and C) and PCDHGA3 is a member of the gamma subfamily A.

# Material Safety Data Sheet

## Anti-Protocadherin Gamma A3 (Monoclonal Antibody) SMC-451

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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.

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### 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

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### Physical Data

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

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### Fire and Explosion Hazard and Reactivity Data

NOT APPLICABLE

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### 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.

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### Preventative Measures

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

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### 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.

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### 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.

Creation Date: 07/03/2013