KCNQ4 Antibody, S43-6

Mouse Anti-Human KCNQ4 Monoclonal IgG1

Catalog No. SMC-309

StressMarq Biosciences INC.

Discovery through partnership | Excellence through quality

Overview	
Product Name	Anti-KCNQ4 Antibody: Clone S43-6
Sizes Available	100 µg (Catalog No. SMC-309D)
Species Reactivity	Human | Mouse | Rat
Tested Applications	WB | IHC | ICC/IF | IP
Antibody Dilution	WB (1:1000), IHC (1:1000), ICC/IF (1:100); optimal dilutions for assays should be determined by the user.
Immunogen	Fusion protein amino acids 2-77 of human KCNQ4
Concentration	1 mg/ml

Properties	
Storage Buffer	PBS pH7.4, 50% glycerol, 0.09% sodium azide
Storage Conditions/ Shipping Temperature	-20ºC; 1 year+ Avoid freeze/ thaw cycle. Blue Ice or 4ºC.
Purification	Protein G Purified
Product Type	Monoclonal
Clone Number	S43-6
Isotype	IgG1
Specificity	Detects ~77kDa.
Certificate of Analysis	1 µg/ml of SMC-309 was sufficient for detection of KCNQ4 in 10 µg of COS-1 cell lysate transiently expressing KCNQ4 by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

Biological Description	
Alternative Name(s)	DFNA 2 antibody, DFNA2 antibody, KCNQ 4 antibody, Kcnq4 antibody, KCNQ4_HUMAN antibody, KQT like 4 antibody, KQT-like 4 antibody, KV7.4 antibody, Potassium channel KQT like 4 antibody, Potassium channel subunit alpha KvLQT4 antibody, Potassium voltage gated channel KQT like protein 4 antibody, Potassium voltage gated channel KQT like subfamily member 4 antibody, Potassium voltage gated channel subfamily KQT member 4 antibody, Potassium voltage-gated channel subfamily KQT member 4 antibody, Voltage gated potassium channel subunit Kv7.4 antibody, Voltage-gated potassium channel subunit Kv7.4 antibody
Research Area(s)	Neuroscience | Ion Channels | Potassium Channels | Voltage-Gated Potassium Channels | Cancer
Cellular Localization	Basal Cell Membrane
Sequence References	Gene ID: 9132; Accession Number: NP_004691.2; Swiss Prot: P56696
Function	The protein encoded by this gene forms a potassium channel that is thought to play a critical role in the regulation of neuronal excitability (1), particularly in sensory cells of the cochlea (2). The current generated by this channel is inhibited by M1 muscarinic acetylcholine receptors and activated by retigabine, a novel anti-convulsant drug (3). 1. Hernandez C.C., Zaiko O., Tolstykh G.P., Shapiro M.S. (2008) J Physiol. 586(7): 1811-1821. 2. Kharkovets T., et al. (2006) EMBO J. 25(3): 642-652. 3. Tatulian L., Delmas P., Abogadie F.C., Brown D.A. (2001) J Neuroscience. 21(15): 5535-5545.

Please Note: All products are for in vitro research use only and are not intended for use in humans or animals.

StressMarq Biosciences Inc. | PO Box 55036 Cadboro Bay | Victoria BC V8N 4G0 | Canada
www.stressmarq.com | Phone: +1 250 294 9065 | Fax: +1 250 294 9025 | E-mail: sales@stressmarq.com

Created/Modified: 21-Dec-2017

Material Safety Data Sheet
Anti-KCNQ4 Antibody (Monoclonal) SMC-309

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

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.

Chemical Name	CAS No.	Percent
Sodium Azide	26628-22-8	0.09-0.1%

Physical Data

This product consists of Mouse immunoglobulin in PBS pH7.4, 50% glycerol, 0.09% sodium azide, 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.