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KCNQ4 Antibody
KCNQ4 Antibody, Clone S43-6
Catalog # ASM10187

Specification

KCNQ4 Antibody - Product Information

Application	IHC, WB
Primary Accession	P56696
Other Accession	NP_004691.2
Host	Mouse
Isotype	IgG1
Reactivity	Human, Mouse, Rat
Clonality	Monoclonal

Description
Mouse Anti-Human KCNQ4 Monoclonal IgG1

Target/Specificity
Detects ~77kDa.

Other Names
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

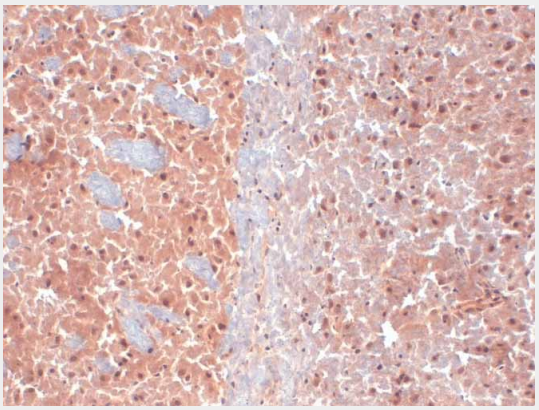
Immunogen
Fusion protein amino acids 2-77 of human KCNQ4

Purification
Protein G Purified

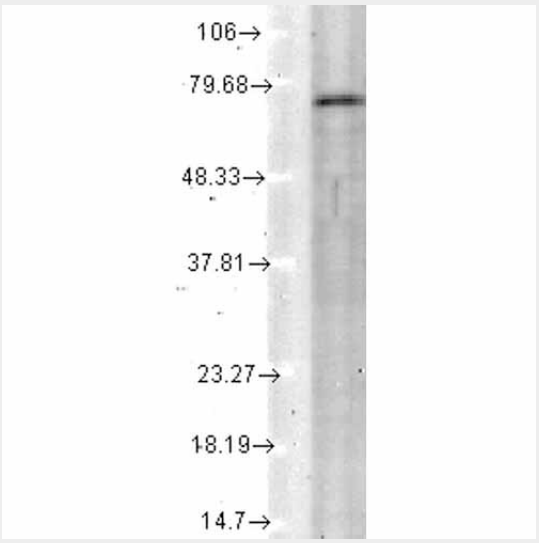
Storage	-20ºC

Storage Buffer
PBS pH7.4, 50% glycerol, 0.09% sodium azide

Shipping Temperature	Blue Ice or 4ºC



Immunohistochemistry analysis using Mouse Anti-KCNQ4 Monoclonal Antibody, Clone S43-6 (ASM10187). Tissue: frozen brain section. Species: mouse. Fixation: 10% Formalin Solution for 12-24 hours at RT. Primary Antibody: Mouse Anti-KCNQ4 Monoclonal Antibody (ASM10187) at 1:1000 for 1 hour at RT. Secondary Antibody: HRP/DAB Detection System: Biotinylated Goat Anti-Mouse, Streptavidin Peroxidase, DAB Chromogen (brown) for 30 minutes at RT. Counterstain: Mayer Hematoxylin (purple/blue) nuclear stain at 250-500 µl for 5 minutes at RT.



Western Blot analysis of Rat tissue lysate

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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.

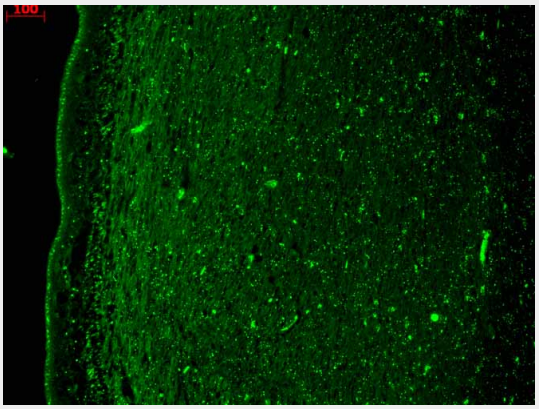
Cellular Localization
Plasma Membrane | Basal Cell Membrane

KCNQ4 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

showing detection of KCNQ4 protein using Mouse Anti-KCNQ4 Monoclonal Antibody, Clone S43-6 (ASM10187). Load: 15 µg. Block: 1.5% BSA for 30 minutes at RT. Primary Antibody: Mouse Anti-KCNQ4 Monoclonal Antibody (ASM10187) at 1:1000 for 2 hours at RT. Secondary Antibody: Sheep Anti-Mouse IgG: HRP for 1 hour at RT.



Immunohistochemistry analysis using Mouse Anti-KCNQ4 Monoclonal Antibody, Clone S43-6 (ASM10187). Tissue: hippocampus. Species: Human. Fixation: Bouin's Fixative and paraffin-embedded. Primary Antibody: Mouse Anti-KCNQ4 Monoclonal Antibody (ASM10187) at 1:1000 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50 for 1 hour at RT.

KCNQ4 Antibody - Background

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).

KCNQ4 Antibody - References

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.