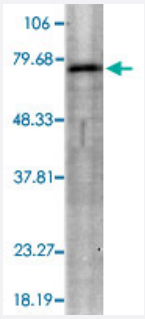
KCNQ4 monoclonal antibody, clone S43-6

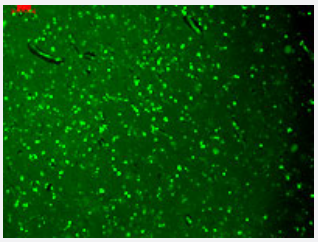
Catalog # MAB6656 Size 100 ug

Applications



Western Blot (Tissue lysate)

Western blot analysis of rat tissue (a blend of rat skeletal muscle, heart, brain, kidney, liver, lung, pancreas, testes, spleen, and thymus) mixed lysate with KCNQ4 monoclonal antibody, clone S43-6 (Cat # MAB6656).



Immunofluorescence

Immunofluorescence staining in human hippocampus with KCNQ4 monoclonal antibody, clone S43-6 (Cat # MAB6656).

Specification

Product Description	Mouse monoclonal antibody raised against partial recombinant KCNQ4.
Immunogen	Recombinant fusion protein corresponding to amino acids 2-77 of human KCNQ4.
Host	Mouse
Reactivity	Human, Mouse, Rat
Specificity	Detects ~77KDa.
Form	Liquid
Isotype	IgG1

Recommend Usage	Western Blot (1-10 ug/mL) Immunohistochemistry (0.1-1.0 ug/mL) Immunocytochemistry (0.1-1.0 ug/mL) Immunofluorescence (1.0-10 ug/mL) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, pH 7.4 (50% glycerol, 0.09% sodium azide)
Storage Instruction	Store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

- Western Blot (Tissue lysate)

  Western blot analysis of rat tissue (a blend of rat skeletal muscle, heart, brain, kidney, liver, lung, pancreas, testes, spleen, and thymus) mixed lysate with KCNQ4 monoclonal antibody, clone S43-6 (Cat # MAB6656).

- Immunocytochemistry

- Immunofluorescence

  Immunofluorescence staining in human hippocampus with KCNQ4 monoclonal antibody, clone S43-6 (Cat # MAB6656).

- Immunoprecipitation

Gene Info — KCNQ4

Entrez GeneID	9132
Protein Accession#	P56696
Gene Name	KCNQ4
Gene Alias	DFNA2, KV7.4
Gene Description	potassium voltage-gated channel, KQT-like subfamily, member 4
Omim ID	600101 603537
Gene Ontology	Hyperlink

Gene Summary	The protein encoded by this gene forms a potassium channel that is thought to play a critical role in the regulation of neuronal excitability, particularly in sensory cells of the cochlea. The current generated by this channel is inhibited by M1 muscarinic acetylcholine receptors and activated by retigabine, a novel anti-convulsant drug. The encoded protein can form a homomultimeric potassium channel or possibly a heteromultimeric channel in association with the protein encoded by the KCNQ3 gene. Defects in this gene are a cause of nonsyndromic sensorineural deafness type 2 (DFNA2), an autosomal dominant form of progressive hearing loss. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq
Other Designations	OTTHUMP00000009219|potassium channel KQT-like 4|potassium voltage-gated channel KQT-like protein 4

Publication Reference

- Congenital long QT syndrome.

  Crotti L, Celano G, Dagradi F, Schwartz PJ.

  Orphanet Journal of Rare Diseases 2008 Jul; 3:18.

- Ca(V)1.2 calcium channel dysfunction causes a multisystem disorder including arrhythmia and autism.

  Splawski I, Timothy KW, Sharpe LM, Decher N, Kumar P, Bloise R, Napolitano C, Schwartz PJ, Joseph RM, Condouris K, Tager-Flusberg H, Priori SG, Sanguinetti MC, Keating MT.

  Cell 2004 Oct; 119(1):19.

Disease

- Deafness
- Genetic Predisposition to Disease
- Hearing Loss