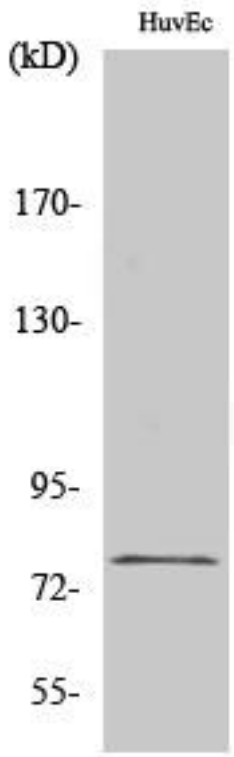
KCNQ4 Monoclonal Antibody

Catalog No	YP-mAb-16438
Isotype	IgG
Reactivity	Human;Mouse
Applications	WB
Gene Name	KCNQ4
Protein Name	Potassium voltage-gated channel subfamily KQT member 4
Immunogen	The antiserum was produced against synthesized peptide derived from human KCNQ4. AA range:644-693
Specificity	KCNQ4 Monoclonal Antibody detects endogenous levels of KCNQ4 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	KCNQ4; Potassium voltage-gated channel subfamily KQT member 4; KQT-like 4; Potassium channel subunit alpha KvLQT4; Voltage-gated potassium channel subunit Kv7.4
Observed Band	80kD
Cell Pathway	Basal cell membrane; Multi-pass membrane protein. Situated at the basal membrane of cochlear outer hair cells. .
Tissue Specificity	Expressed in the outer, but not the inner, sensory hair cells of the cochlea. Slightly expressed in heart, brain and skeletal muscle.
Function	alternative products:Additional isoforms seem to exist,disease:Defects in KCNQ4 are the cause of non-syndromic sensorineural deafness autosomal dominant type 2 (DFNA2A) [MIM:600101]. DFNA2A is a form of sensorineural hearing loss. Sensorineural deafness results from damage to the neural receptors of the inner ear, the nerve pathways to the brain, or the area of the brain that receives sound information.,domain:The segment S4 is probably the voltage-sensor and is characterized by a series of positively charged amino acids at every third position.,function:Probably important in the regulation of neuronal excitability. May underlie a potassium current involved in regulating the excitability of sensory cells of the cochlea. KCNQ4 channels are blocked by linopirdin, XE991 and bepridil, whereas clofilium is without significant effect. Muscarinic agonist oxotremorine-M strongly suppress KCNQ4 c

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, 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, Jul 2008],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using KCNQ4 Monoclonal Antibody