



# KCNE1 Monoclonal Antibody

Catalog No	YP-mAb-05951
Isotype	IgG
Reactivity	Human;Rat;Mouse
Applications	WB
Gene Name	KCNE1
Protein Name	Potassium voltage-gated channel subfamily E member 1 (Delayed rectifier potassium channel subunit Isk) (IKs producing slow voltage-gated potassium channel subunit beta Mink) (Minimal potassium channel)
Immunogen	Synthesized peptide derived from human protein . at AA range: 40-120
Specificity	KCNE1 Monoclonal Antibody detects endogenous levels of protein.
Formulation	Liquid in PBS containing 50% glycerol, 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	
Observed Band	14kD
Cell Pathway	Cell membrane ; Single-pass type I membrane protein . Apical cell membrane . Membrane raft . Colocalizes with KCNB1 at the plasma membrane (By similarity). Targets to the membrane raft when associated with KCNQ1 (PubMed:20533308).
Tissue Specificity	Expressed in lung, kidney, testis, ovaries, small intestine, peripheral blood leukocytes. Expressed in the heart (PubMed:19219384). Not detected in pancreas, spleen, prostate and colon. Restrictively localized in the apical membrane portion of epithelial cells.
Function	disease:Defects in KCNE1 are the cause of Jervell and Lange-Nielsen syndrome type 2 (JLNS2) [MIM:612347]. JLNS2 is an autosomal recessive disorder characterized by congenital deafness, prolongation of the QT interval, syncopal attacks due to ventricular arrhythmias, and a high risk of sudden death.,disease:Defects in KCNE1 are the cause of long QT syndrome type 5 (LQT5) [MIM:176261]. Long QT syndromes are heart disorders characterized by a prolonged QT interval on the ECG and polymorphic ventricular arrhythmias. They cause syncope and sudden death in response to exercise or emotional stress. KCNE1 mutants form channels that open slowly and close rapidly, thereby diminishing potassium currents.,function:Ancillary protein that assembles as a



beta subunit with a voltage-gated potassium channel complex of pore-forming alpha subunits. Modulates the gating kinetics and enhances stability of th

#### Background

potassium voltage-gated channel subfamily E regulatory subunit 1(KCNE1) Homo sapiens The product of this gene belongs to the potassium channel KCNE family. Potassium ion channels are essential to many cellular functions and show a high degree of diversity, varying in their electrophysiologic and pharmacologic properties. This gene encodes a transmembrane protein known to associate with the product of the KVLQT1 gene to form the delayed rectifier potassium channel. Mutation in this gene are associated with both Jervell and Lange-Nielsen and Romano-Ward forms of long-QT syndrome. Alternatively spliced transcript variants encoding the same protein have been identified. [provided by RefSeq, Jul 2008],

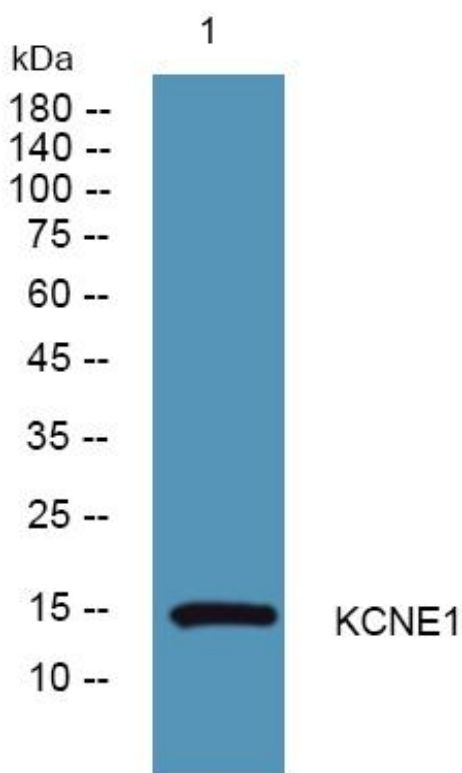
#### matters needing attention

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 KCNE1 Monoclonal Antibody