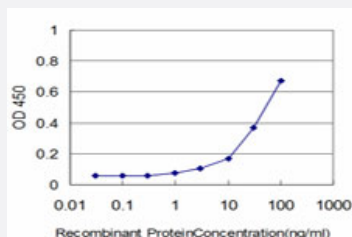


KCNE1 monoclonal antibody (M01), clone 5B12

Catalog # H00003753-M01

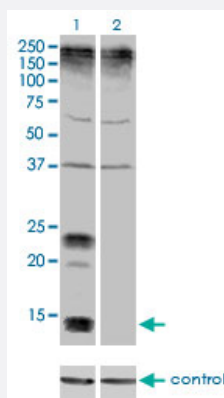
Size 100 ug

Applications



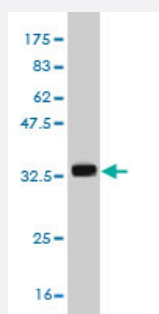
Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged KCNE1 is approximately 3ng/ml as a capture antibody.



RNAi Knockdown (Antibody validated)

Western blot analysis of KCNE1 over-expressed 293 cell line, cotransfected with KCNE1 Validated Chimera RNAi (Cat # H00003753-R01V) (Lane 2) or non-transfected control (Lane 1). Blot probed with KCNE1 monoclonal antibody (M01), clone 5B12 (Cat # H00003753-M01). GAPDH (36.1 kDa) used as specificity and loading control.



Western Blot detection against Immunogen (32.67 KDa) .

Specification

Product Description

Mouse monoclonal antibody raised against a partial recombinant KCNE1.

Immunogen	KCNE1 (NP_000210, 67 a.a. ~ 129 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Sequence	RSKKLEHSNDPFNVYIESDAWQEKDKAYVQARVLESYRSCYVVENHLAIEQPNTLHPETKPSP
Host	Mouse
Reactivity	Human
Isotype	IgG1 Kappa
Quality Control Testing	Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (32.67 KDa) .
Storage Buffer	In 1x PBS, pH 7.4
Storage Instruction	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot (Recombinant protein)

[Protocol Download](#)

- Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged KCNE1 is approximately 3ng/ml as a capture antibody.

[Protocol Download](#)

- ELISA

- RNAi Knockdown (Antibody validated)

Western blot analysis of KCNE1 over-expressed 293 cell line, cotransfected with KCNE1 Validated Chimera RNAi (Cat # H00003753-R01V) (Lane 2) or non-transfected control (Lane 1). Blot probed with KCNE1 monoclonal antibody (M01), clone 5B12 (Cat # H00003753-M01). GAPDH (36.1 kDa) used as specificity and loading control.

[Protocol Download](#)

Gene Info — KCNE1

Entrez GeneID	3753
GeneBank Accession#	NM_000219
Protein Accession#	NP_000210

Gene Name	KCNE1
Gene Alias	FLJ18426, FLJ38123, FLJ94103, ISK, JLNS, JLNS2, LQT2/5, LQT5, MGC33114, Mink
Gene Description	potassium voltage-gated channel, Isk-related family, member 1
Omim ID	176261 220400
Gene Ontology	Hyperlink
Gene Summary	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 electro physiologic 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]
Other Designations	IKs producing slow voltage-gated potassium channel subunit beta Mink OTTHUMP00000108623 OTTHUMP00000108625 OTTHUMP00000108626 cardiac delayed rectifier potassium channel protein delayed rectifier potassium channel subunit Isk minimal potassium channel pot

Publication Reference

- [Chronic in vivo angiotensin II administration differentially modulates the slow delayed rectifier channels in atrial and ventricular myocytes.](#)

Zankov DP, Salloum FN, Jiang M, Tseng GN.

Heart Rhythm 2018 Aug; [Epub].

Application: IF, WB-Ti, Mouse, Atria, Ventricles

- [Adult Ventricular Myocytes Segregate KCNQ1 and KCNE1 to Keep the IKs Amplitude in Check Until When Larger IKs Is Needed.](#)

Jiang M, Wang Y, Tseng GN.

Circulation. Arrhythmia and Electrophysiology 2017 Jun; 10(6): e005084.

Application: IF, WB, Dog, Dog ventricular myocytes

- [\[Ca²⁺\]_i Elevation and Oxidative Stress Induce KCNQ1 Protein Translocation from the Cytosol to the Cell Surface and Increase Slow Delayed Rectifier \(IKs\) in Cardiac Myocytes.](#)

Wang Y, Zankov DP, Jiang M, Zhang M, Henderson SC, Tseng GN.

The Journal of Biological Chemistry 2013 Dec; 288(49):35358.

Application: IF, WB-Ti, WB-Tr, Guinea pig, Monkey, Rat, Cardiac, Ventricular myocytes, Heart, COS-7 cells, NRVMs

- [KCNE2 is colocalized with KCNQ1 and KCNE1 in cardiac myocytes and may function as a negative modulator of I\(Ks\) current amplitude in the heart.](#)

Wu DM, Jiang M, Zhang M, Liu XS, Korolkova YV, Tseng GN.

Heart Rhythm 2006 Dec; 3(12):1469.

Application: IF, WB, Monkey, Rat, COS-7 cells, Rat ventricular myocardium, Rat myocytes

Disease

- [Arrhythmia](#)
- [Arrhythmias](#)
- [Atrial Fibrillation](#)
- [Atrioventricular Block](#)
- [Brugada Syndrome](#)
- [Cardiomyopathies](#)
- [Cardiovascular Diseases](#)
- [Channelopathies](#)
- [Chromosome Deletion](#)
- [Cognition](#)
- [Death](#)
- [Diabetes Mellitus](#)
- [Edema](#)
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- [Genetic Predisposition to Disease](#)
- [Hearing Loss](#)
- [Heart Arrest](#)
- [Heart Block](#)
- [Heart Valve Diseases](#)
- [Hyperparathyroidism](#)

- [Long QT syndrome](#)
- [Meniere Disease](#)
- [Myocardial Infarction](#)
- [Romano-Ward Syndrome](#)
- [Schizophrenia](#)
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