

Datasheet for ABIN7581906
anti-KCNE4 antibody (Intracellular)



[Go to Product page](#)

Overview

Quantity:	50 µL
Target:	KCNE4
Binding Specificity:	AA 56-68, Intracellular
Reactivity:	Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This KCNE4 antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Purpose:	A Rabbit Polyclonal Antibody to KCNE4 (MiRP3) Subunit
Immunogen:	(C)GYMKSKRREKKSS, corresponding to amino acid residues 56-68 of mouse KCNE4
Sequence:	(C)GYMKSKRREK KSS
Isotype:	IgG
Specificity:	Intracellular, C-terminus
Predicted Reactivity:	Rat,human - identical
Characteristics:	Highly specific antibody directed against an epitope of mouse KCNE4. Anti-KCNE4 (MiRP3) Antibody (ABIN7581906) can be used in western blot analysis. It has been designed to recognize KCNE4 from rat, mouse and human samples.
Purification:	Affinity purified on immobilized antigen.

Target Details

Target:	KCNE4
Alternative Name:	KCNE4 (KCNE4 Products)
Background:	Potassium channel subunit β MiRP3, MinK-related peptide 3, Potassium voltage-gated channel subfamily E member 4, The K⁺ voltage-gated channel subfamily E member (KCNE) family is a group of small, non-conducting, single transmembrane domain proteins that associate with pore-forming potassium channel subunits to form mixed complexes with unique characteristics¹. Five different KCNE proteins have been described (KCNE1-5)². The KCNE regulatory subunits are small proteins (14-20 kD) with a type-1 integral membrane topology. It is believed that both the cytoplasmic C-terminus tail and the transmembrane domain are necessary for the interaction with the α subunits¹. MinK-related peptides (MiRPs) MiRP3, protein encoded by KCNE4³. The importance of these proteins to normal physiology of the heart and nervous system is exposed by their association with clinical disorders such as congenital long QT syndrome, drug-induced cardiac arrhythmias, sensorineural deafness, and periodic paralysis⁴. In addition, MiRPs influence the normal physiology of endocrine and exocrine glands, intestinal secretion, and renal excretion. MiRP3 is found to co-localize with KV4.2 subunits that contribute to cardiac transient outward K⁺ currents⁵. Levels of the KCNE4 transcript in human cardiac ventricle are robust and increase in patients with congestive failure suggesting a regulatory function for MiRP3 in the heart⁶. In addition to regulating KV4.2, MiRP3 also regulates KCNQ1 and BK channels^{2,5}.
Gene ID:	57814
UniProt:	Q9WTW3

Application Details

Application Notes:	Antigen preadsorption control: 1 μ g peptide per 1 μ g antibody Application Dilutions Immunohistochemistry paraffin embedded sections ihc: N/A Application Dilutions Western blot wb: 1:600
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	0.2 mL double distilled water (DDW).
Concentration:	1 mg/mL

Handling

Buffer:	PBS pH 7.4
---------	------------

Storage:	4 °C,-20 °C
----------	-------------

Storage Comment:	Storage before reconstitution: The antibody ships as a lyophilized powder at room temperature. Upon arrival, it should be stored at -20°C. Storage after reconstitution: The reconstituted solution can be stored at 4°C for up to 1 week. For longer periods, small aliquots should be stored at -20°C. Avoid multiple freezing and thawing. Centrifuge all antibody preparations before use (10000 x g 5 min).
------------------	--