



Mouse anti-Human CACNA1C monoclonal antibody, clone 5E21 (CABT-B9883)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Immunogen	CACNA1C (NP_000710, 2039 a.a. ~ 2139 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Isotype	IgG1
Source/Host	Mouse
Species Reactivity	Human
Clone	5E21
Conjugate	Unconjugated
Applications	WB,sELISA,ELISA
Sequence Similarities	AVLISEGLGQFAQDPKFIEVTQELADACDMTIEEMESAADNLSSGAPQSPNGALLPFV NCRDAGQDRAGGEEDAGCVRARGRPSEELQDSRVYVSSL*
Format	Liquid
Size	100 µg
Buffer	In 1x PBS, pH 7.2
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

BACKGROUND

Introduction	This gene encodes an alpha-1 subunit of a voltage-dependent calcium channel. Calcium channels mediate the influx of calcium ions into the cell upon membrane polarization. The
---------------------	--

alpha-1 subunit consists of 24 transmembrane segments and forms the pore through which ions pass into the cell. The calcium channel consists of a complex of alpha-1, alpha-2/delta, beta, and gamma subunits in a 1:1:1:1 ratio. There are multiple isoforms of each of these proteins, either encoded by different genes or the result of alternative splicing of transcripts. The protein encoded by this gene binds to and is inhibited by dihydropyridine. Alternative splicing results in many transcript variants encoding different proteins. Some of the predicted proteins may not produce functional ion channel subunits. [provided by RefSeq, Oct 2012]

Keywords	CACNA1C; calcium channel, voltage-dependent, L type, alpha 1C subunit; TS; LQT8; CACH2; CACN2; CaV1.2; CCHL1A1; CACNL1A1; voltage-dependent L-type calcium channel subunit alpha-1C; DHPR, alpha-1 subunit; voltage-dependent L-type Ca2+ channel alpha 1 subunit; calcium channel, cardiac dihydropyridine-sensitive, alpha-1 subunit; calcium channel, L type, alpha-1 polypeptide, isoform 1, cardiac muscle; voltage-gated L-type calcium channel Cav1.2 alpha 1 subunit, splice variant 10*;
-----------------	---

GENE INFORMATION

Entrez Gene ID	775
UniProt ID	Q13936
Pathway	Alzheimer's disease, organism-specific biosystem; Alzheimer's disease, conserved biosystem; Arrhythmogenic right ventricular cardiomyopathy (ARVC), organism-specific biosystem; Arrhythmogenic right ventricular cardiomyopathy (ARVC), conserved biosystem; Axon guidance, organism-specific biosystem; Calcium Regulation in the Cardiac Cell, organism-specific biosystem
Function	calmodulin binding; protein binding; voltage-gated calcium channel activity; voltage-gated ion channel activity
