10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

CACNA1I Antibody (monoclonal) (M02)

Mouse monoclonal antibody raised against a partial recombinant CACNA1I.
Catalog # AT1364a

Product Information

Application	WB, E
Primary Accession	Q9P0X4
Other Accession	NM_021096
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG1 Kappa
Clone Names	3H5
Calculated MW	245103

Additional Information

Gene ID	8911
Other Names	Voltage-dependent T-type calcium channel subunit alpha-1I, Voltage-gated calcium channel subunit alpha Cav33, Ca(v)33, CACNA1I, KIAA1120
Target/Specificity	CACNA1I (NP_066919, 233 a.a. ~ 331 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	CACNA1I Antibody (monoclonal) (M02) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

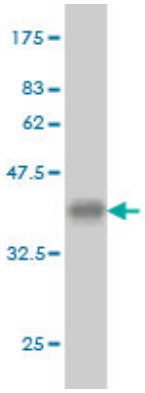
Voltage-dependent calcium channels control the rapid entry of Ca(2+) into a variety of cell types and are therefore involved in both electrical and cellular signaling. T-type channels, such as CACNA1I, are activated by small membrane depolarizations and can generate burst firing and pacemaker activity.

References

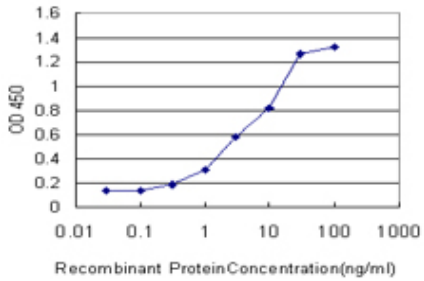
Differential interactions of Na+ channel toxins with T-type Ca2+ channels. Sun H, et al. J Gen Physiol, 2008 Jul. PMID 18591418.Selective inhibition of Cav3.3 T-type calcium channels by Galphaq/11-coupled muscarinic acetylcholine receptors. Hildebrand ME, et al. J Biol Chem, 2007 Jul 20. PMID 17535809.CACNA1I

is not associated with childhood absence epilepsy in the Chinese Han population. Wang J, et al. Pediatr Neurol, 2006 Sep. PMID 16939858.Association of Catsper1 or -2 with Ca(v)3.3 leads to suppression of T-type calcium channel activity. Zhang D, et al. J Biol Chem, 2006 Aug 4. PMID 16740636.International Union of Pharmacology. XLVIII. Nomenclature and structure-function relationships of voltage-gated calcium channels. Catterall WA, et al. Pharmacol Rev, 2005 Dec. PMID 16382099.

Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.63 KDa) .



Detection limit for recombinant GST tagged CACNA1I is approximately 0.3ng/ml as a capture antibody.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.