

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

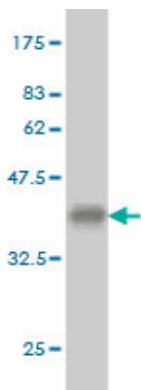
Voltage-dependent calcium channels control the rapid entry of Ca²⁺ into a variety of cell types and are therefore involved in both electrical and cellular signaling. T-type channels, such as CACNA1I, are activated by small membrane depolarizations and can generate burst firing and pacemaker activity.

References

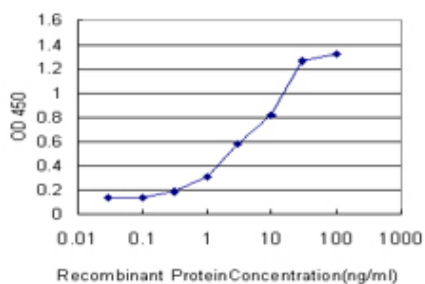
Differential interactions of Na⁺ channel toxins with T-type Ca²⁺ channels. Sun H, et al. J Gen Physiol, 2008 Jul. PMID 18591418. Selective inhibition of Cav3.3 T-type calcium channels by Galphaq/11-coupled muscarinic acetylcholine receptors. Hildebrand ME, et al. J Biol Chem, 2007 Jul 20. PMID 17535809. 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 $Ca_v3.3$ 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 0.3 ng/ml as a capture antibody.

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