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CACNA1I Antibody (monoclonal) (M02)

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

Specification

CACNA1I Antibody (monoclonal) (M02) - Product Information

Application	**WB, E**
Primary Accession	Q9P0X4
Other Accession	NM_021096
Reactivity	**Human**
Host	**mouse**
Clonality	**Monoclonal**
Isotype	**IgG1 Kappa**
Calculated MW	**245103**

CACNA1I Antibody (monoclonal) (M02) - 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

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.

CACNA1I Antibody (monoclonal) (M02) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot

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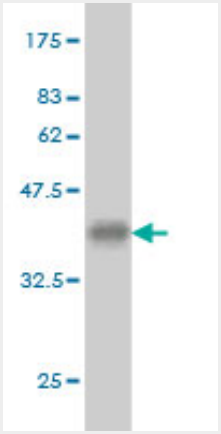
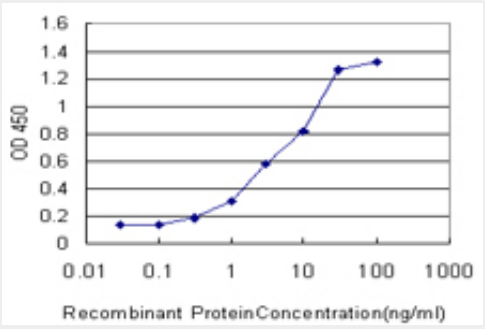
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CACNA1I Antibody (monoclonal) (M02) - 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.

CACNA1I Antibody (monoclonal) (M02) - 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.

CACNA1I Antibody (monoclonal) (M02) - 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.