

**CACNG3 Antibody (monoclonal) (M01)****Mouse monoclonal antibody raised against a partial recombinant CACNG3.****Catalog # AT1369a****Specification**

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**CACNG3 Antibody (monoclonal) (M01) - Product Information**

Application	WB, E
Primary Accession	<a href="#">O60359</a>
Other Accession	<a href="#">NM_006539</a>
Reactivity	Human, Rat
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1 Kappa
Calculated MW	35549

**CACNG3 Antibody (monoclonal) (M01) - Additional Information****Gene ID** 10368**Other Names**

Voltage-dependent calcium channel gamma-3 subunit, Neuronal voltage-gated calcium channel gamma-3 subunit, Transmembrane AMPAR regulatory protein gamma-3, TARP gamma-3, CACNG3

**Target/Specificity**

CACNG3 (NP\_006530, 199 a.a. ~ 297 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**

CACNG3 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

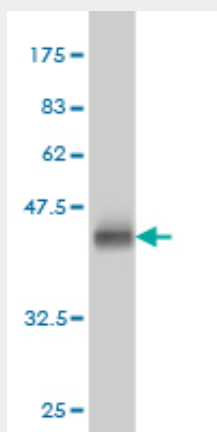
**CACNG3 Antibody (monoclonal) (M01) - Protocols**

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

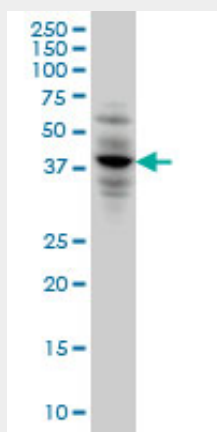
- [Western Blot](#)
- [Blocking Peptides](#)

- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

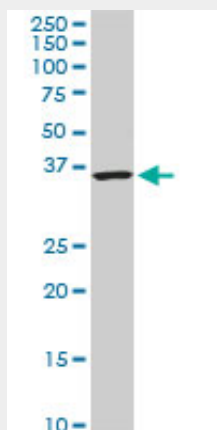
### CACNG3 Antibody (monoclonal) (M01) - Images



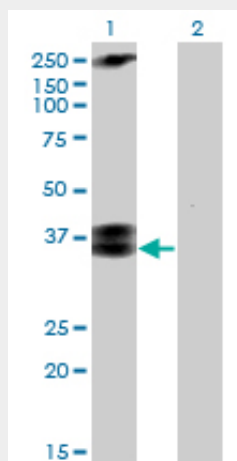
Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (36.63 KDa) .



CACNG3 monoclonal antibody (M01), clone 3E4 Western Blot analysis of CACNG3 expression in HeLa ( (Cat # AT1369a )



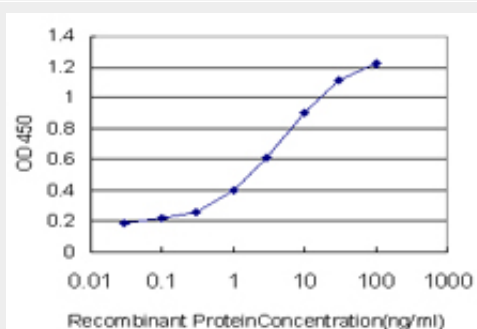
CACNG3 monoclonal antibody (M01), clone 3E4. Western Blot analysis of CACNG3 expression in PC-12((Cat # AT1369a )



Western Blot analysis of CACNG3 expression in transfected 293T cell line by CACNG3 monoclonal antibody (M01), clone 3E4.

Lane 1: CACNG3 transfected lysate(35.5 KDa).

Lane 2: Non-transfected lysate.



Detection limit for recombinant GST tagged CACNG3 is approximately 0.3ng/ml as a capture antibody.

### **CACNG3 Antibody (monoclonal) (M01) - Background**

L-type calcium channels are composed of five subunits. The protein encoded by this gene represents one of these subunits, gamma, and is one of several gamma subunit proteins. It is an integral membrane protein that is thought to stabilize the calcium channel in an inactive (closed) state. This protein is similar to the mouse stargazin protein, mutations in which have been associated with absence seizures, also known as petit-mal or spike-wave seizures. This gene is a member of the neuronal calcium channel gamma subunit gene subfamily of the PMP-22/EMP/MP20 family. This gene is a candidate gene for a familial infantile convulsive disorder with paroxysmal choreoathetosis.

### **CACNG3 Antibody (monoclonal) (M01) - References**

Motor protein-dependent transport of AMPA receptors into spines during long-term potentiation. Correia SS, et al. Nat Neurosci, 2008 Apr. PMID 18311135. Linkage and association analysis of CACNG3 in childhood absence epilepsy. Everett KV, et al. Eur J Hum Genet, 2007 Apr. PMID 17264864. The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC). Gerhard DS, et al. Genome Res, 2004 Oct. PMID 15489334. Complete

sequencing and characterization of 21,243 full-length human cDNAs. Ota T, et al. Nat Genet, 2004 Jan. PMID 14702039. Adaptor protein complex-4 (AP-4) is expressed in the central nervous system neurons and interacts with glutamate receptor delta2. Yap CC, et al. Mol Cell Neurosci, 2003 Oct. PMID 14572453.