

### TCAP Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a full length recombinant TCAP. Catalog # AT4174a

#### Specification

## TCAP Antibody (monoclonal) (M01) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW WB, E O15273 BC012628 Human mouse Monoclonal IgG1 kappa 19052

### TCAP Antibody (monoclonal) (M01) - Additional Information

Gene ID 8557

**Other Names** Telethonin, Titin cap protein, TCAP

**Target/Specificity** TCAP (AAH12628, 1 a.a. ~ 167 a.a) full-length 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** TCAP Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

#### TCAP Antibody (monoclonal) (M01) - Protocols

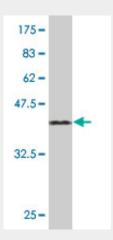
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry

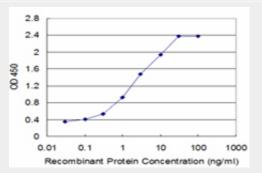


- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

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



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (44.11 KDa).



Detection limit for recombinant GST tagged TCAP is approximately 0.1ng/ml as a capture antibody.

#### TCAP Antibody (monoclonal) (M01) - Background

Sarcomere assembly is regulated by the muscle protein titin. Titin is a giant elastic protein with kinase activity that extends half the length of a sarcomere. It serves as a scaffold to which myofibrils and other muscle related proteins are attached. This gene encodes a protein found in striated and cardiac muscle that binds to the titin Z1-Z2 domains and is a substrate of titin kinase, interactions thought to be critical to sarcomere assembly. Mutations in this gene are associated with limb-girdle muscular dystrophy type 2G.

# TCAP Antibody (monoclonal) (M01) - References

Physiogenomic analysis of statin-treated patients: domain-specific counter effects within the ACACB gene on low-density lipoprotein cholesterol? Rua?o G, et al. Pharmacogenomics, 2010 Jul. PMID 20602615.A novel custom resequencing array for dilated cardiomyopathy. Zimmerman RS, et al. Genet Med, 2010 May. PMID 20474083.Common susceptibility variants examined for association with dilated cardiomyopathy. Rampersaud E, et al. Ann Hum Genet, 2010 Mar. PMID 20201937.The role of Lamin A/C mutations in Danish patients with idiopathic dilated cardiomyopathy. M?ller DV, et al. Eur J Heart Fail, 2009 Nov. PMID 19875404.Depletion of zebrafish Tcap leads to muscular dystrophy via disrupting sarcomere-membrane interaction, not sarcomere assembly. Zhang R, et al.



Hum Mol Genet, 2009 Nov 1. PMID 19679566.