

### MyoD1 Antibody (N-term) (Ascites)

Mouse Monoclonal Antibody (Mab)
Catalog # AM2147a

### **Specification**

## MyoD1 Antibody (N-term) (Ascites) - Product Information

Application WB,E
Primary Accession P15172

Other Accession <u>P13904</u>, <u>Q02346</u>, <u>P49811</u>, <u>P10085</u>, <u>P16075</u>,

O7YS82, NP 002469, P29331

Reactivity Human

Predicted Bovine, Chicken, Mouse, Pig, Rat, Sheep,

Xenopus Mouse

Host Mouse Clonality Monoclonal

Isotype IgM
Calculated MW 34501
Antigen Region 105-134

## MyoD1 Antibody (N-term) (Ascites) - Additional Information

# **Gene ID 4654**

### **Other Names**

Myoblast determination protein 1, Class C basic helix-loop-helix protein 1, bHLHc1, Myogenic factor 3, Myf-3, MYOD1, BHLHC1, MYF3, MYOD

### **Target/Specificity**

This MyoD1 antibody is generated from mice immunized with a KLH conjugated synthetic peptide between 105-134 amino acids from the N-terminal region of human MyoD1.

### **Dilution**

WB~~1:100~2000

E~~Use at an assay dependent concentration.

#### **Format**

Mouse monoclonal antibody supplied in crude ascites with 0.09% (W/V) sodium azide.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

## **Precautions**

MyoD1 Antibody (N-term) (Ascites) is for research use only and not for use in diagnostic or therapeutic procedures.

### MyoD1 Antibody (N-term) (Ascites) - Protein Information





Name MYOD1

Synonyms BHLHC1, MYF3, MYOD

**Function** Acts as a transcriptional activator that promotes transcription of muscle-specific target genes and plays a role in muscle differentiation. Together with MYF5 and MYOG, co-occupies muscle-specific gene promoter core region during myogenesis. Induces fibroblasts to differentiate into myoblasts. Interacts with and is inhibited by the twist protein. This interaction probably involves the basic domains of both proteins (By similarity).

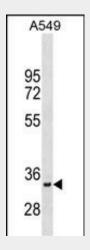
**Cellular Location** Nucleus.

### MyoD1 Antibody (N-term) (Ascites) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

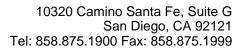
### MyoD1 Antibody (N-term) (Ascites) - Images



MyoD1 Antibody (N-term)(Ascites)(Cat. #AM2147a) western blot analysis in A549 cell line lysates (35µg/lane). This demonstrates the MyoD1 antibody detected the MyoD1 protein (arrow).

### MyoD1 Antibody (N-term) (Ascites) - Background

This gene encodes a nuclear protein that belongs to the basic helix-loop-helix family of transcription factors and the myogenic factors subfamily. It regulates muscle cell differentiation by inducing cell cycle arrest, a prerequisite for myogenic initiation. The protein is also involved in muscle regeneration. It activates its own transcription which may stabilize commitment to myogenesis.





# MyoD1 Antibody (N-term) (Ascites) - References

Xynos, A., et al. Stem Cells 28(5):965-973(2010) Stuelsatz, P., et al. J. Biol. Chem. 285(17):12670-12683(2010) Hiraoka, S., et al. Hum. Pathol. 41(1):38-47(2010) Yerges, L.M., et al. J. Bone Miner. Res. 24(12):2039-2049(2009) Yang, Z., et al. Genes Dev. 23(6):694-707(2009)