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MyoD1 Antibody (N-term) (Ascites)

Mouse Monoclonal Antibody (Mab)
Catalog # AM2147a

Product Information

Application	WB, E
Primary Accession	P15172
Other Accession	P13904, Q02346, P49811, P10085, P16075, Q7YS82, NP_002469
Reactivity	Human
Predicted	Bovine, Chicken, Mouse, Pig, Rat, Xenopus
Host	Mouse
Clonality	Monoclonal
Isotype	IgM
Clone Names	598CT21.2.4
Calculated MW	34501
Antigen Region	105-134

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.

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.

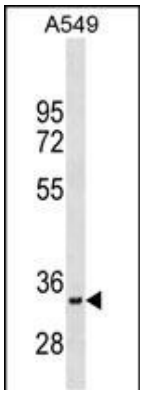
Background

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.

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)

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).