

MYOD1 monoclonal antibody

Catalog: MB66030

Host: N

Mouse

Reactivity: Human

BackGround:

Myoblast determination protein 1 (MyoD1), also called myogenic factor 3 (Myf3), is a member of the MyoD family of muscle specific bHLH transcription factors. This family is responsible for controlling specification of the muscle cell lineage and members are expressed only in skeletal muscle and its precursors. MyoD1 is considered a master regulator of skeletal myogenesis as its expression can induce myogenic differentiation in myoblasts, fibroblasts, and a variety of other cell types. Through ChIP-sequencing experiments, researchers have discovered that MyoD is associated with the promoters of many genes in muscle cells, but it only regulates a subset of those genes. These research studies point to regulation of MyoD transcriptional activity via epigenetic mechanisms involving SWI/SNF complexes and Polycomb and Trithorax Group proteins. Additional influences on muscle development include signal transduction through MAPK, PI3K/Akt, myostatin, NF-KB, and mTOR signaling pathways.

Product:

Mouse IgG. Liquid in PBS containing 50% glycerol, 0.2% BSA and 0.01% sodium azide.

Molecular Weight:

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~ 45 kDa
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Swiss-Prot:

P15172

Purification&Purity:

The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

Applications:

WB (1/500 - 1/1000), IHC (1/100 - 1/300), IF (1/100 - 1/500)

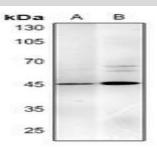
Storage&Stability:

Store at $4 \,^{\circ}{\rm C}$ short term. Aliquot and store at -20 $^{\circ}{\rm C}$ long term. Avoid freeze-thaw cycles.

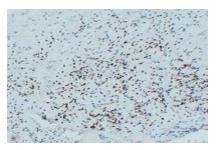
Specificity:

Recognizes endogenous levels of MYOD1 protein.

DATA:



Western blot analysis of MLH1 expression in Hela (A), U2OS (B) whole cell lysates.



Immunohistochemical analysis of MYOD1 staining in human rhabdomyosarcoma formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

Note:

For research use only, not for use in diagnostic procedure.

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