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MyoD1 (Rhabdomyosarcoma Marker) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone SPM427]
Catalog # AH10617

Product Information

Application	IF, FC, IHC-P
Primary Accession	P15172
Other Accession	4654, 181768
Reactivity	Human, Mouse, Rat, Chicken
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1, kappa
Clone Names	SPM427
Calculated MW	34501

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
Application Note	IF~~1:50~200 FC~~1:10~50 IHC-P~~N/A
Format	200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA at 1.0mg/ml.
Storage	Store at 2 to 8°C.Antibody is stable for 24 months.
Precautions	MyoD1 (Rhabdomyosarcoma Marker) Antibody - With BSA and Azide 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.

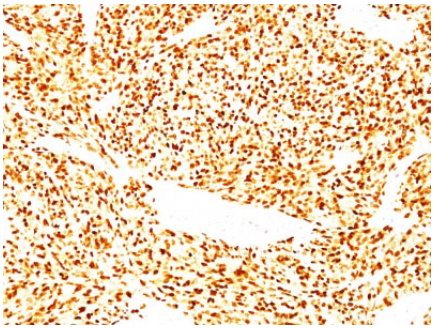
Background

Recognizes a phosphor-protein of 45kDa, identified as MyoD1. The epitope of this MAb maps between amino acid 180-189 in the C-terminal of mouse MyoD1 protein. It does not cross react with myogenin, Myf5, or Myf6. Antibody to MyoD1 labels the nuclei of myoblasts in developing muscle tissues. MyoD1 is not detected in normal adult tissue, but is highly expressed in the tumor cell nuclei of rhabdomyosarcomas. Occasionally nuclear expression of MyoD1 is seen in ectomesenchymoma and a subset of Wilmā€™s tumors. Weak cytoplasmic staining is observed in several non-muscle tissues, including glandular epithelium and also in rhabdomyosarcomas, neuroblastomas, Ewingā€™s sarcomas and alveolar soft part sarcomas.

References

Thulasi R et. al. Cell Growth and Differentiation, 1996, 7(4):531-41. | Wesche WA et. al. American Journal of Surgical Pathology, 1995, 19(3):261-9. | Parham DM et. al. Acta Neuropathologica, 1994, 87:605-11

Images



Formalin-fixed, paraffin-embedded human Rhabdomyosarcoma stained with MyoD1 Monoclonal Antibody (SPM427)