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Product datasheet for TA336376

MYOD1 Mouse Monoclonal Antibody [Clone ID: 5.8A]

Product data:

Product Type:	Primary Antibodies
Clone Name:	5.8A
Applications:	IHC, WB
Recommend Dilution:	WB: 1 ug/ml, IF: 5 ug/ml, IHC: 1:10-1:500, IHC-F: 1:10-1:500, IP: 1 ug/ml
Reactivity:	Feline, Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG1, kappa
Clonality:	Monoclonal
Immunogen:	The 5.8A antibody was made against recombinant mouse MyoD protein but it also recognizes human (myf3), rat, and cat homologs. The epitope of this antibody was mapped to a region within aa 180-189 of mouse MyoD (NP_002469).
Formulation:	PBS containing 0.05% BSA, 0.05% Sodium Azide. Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Concentration:	0.5 mg/ml
Purification:	Protein G purified
Gene Name:	myogenic differentiation 1
Database Link:	NP_002469 Entrez Gene 17927 MouseEntrez Gene 337868 RatEntrez Gene 4654 Human
Background:	The Myogenic determination gene (MyoD) was first identified by the virtue of its ability to convert embryonic mouse fibroblast cells to muscle cells. It was subsequently shown that forced expression of MyoD (human homolog is myf 3) gene in a wide variety of normal and neoplastic cells could either convert the cells to muscle cells or activate a set of the otherwise transcriptionally inactive muscle-specific genes in these cells. The regulatory domain of the MyoD gene product lies within a 70 amino acid region and comprises a basic DNA binding motif and a helix-loop-helix (HLH) dimerization motif. Subsequent studies identified three other genes whose products shared sequence homology for the basic HLH domain of MyoD. These are; myf5, myogenin (human homolog is myf4) and myf6 (also known as MRF4 and herculin).
Synonyms:	bHLHc1; MYF3; MYOD; PUM

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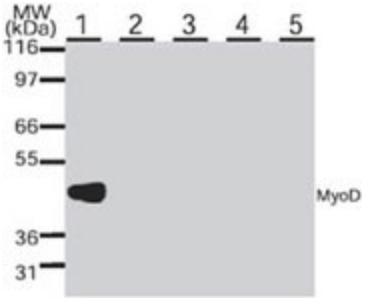
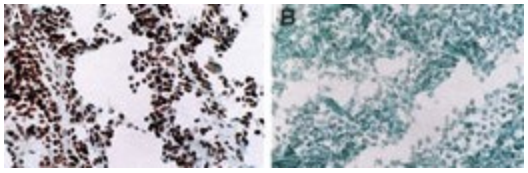
Note: There is considerable literature published using the MyoD, Clone 5.8 antibody. The original development publication of the MyoD antibody, Clone 5.8A showed that the antibody detected MyoD in rhabdomysosarcomas by IHC (frozen) but not in normal adult tissues (Dias, 1992) or normal fetal skeletal muscle. The 5.8A clone also detected MyoD1 in a subset of Wilms' tumors and one ectomesenchyoma, neoplasms known to contain myogenic elements. These results led to the concept in 1992 that the 5.8A clone may be useful for differentiating rhabdomyosarcomas from other soft tissue malignancies. However, as there has been a myriad of publications since Clone 5.8A was first described, users are encourage to consult the scientific literature citing Clone 5.8A to determine the suitability of the antibody for their model system.

Protein Families: Druggable Genome, Transcription Factors

Product images:



Western Blot: MyoD1 Antibody (5.8A) TA336376 - Analysis for MyoD expression in various small round cell tumor lines using 1 ug/ml anti-MyoD mAb. The antibody only reacts with a band of approx. 45 kD in the rhabdomyosarcoma cell line (Rh30, lane 1) but w



Immunohistochemistry: MyoD1 Antibody (5.8A) TA336376 - IHC (F) using the MyoD1, Clone 5.8A antibody in human tissues. A. Rhabdomyosaroma (nuclei are stained), B. Lymphoma (staining is absent)