

MyoD1 Monoclonal Mouse Antibody (5.8A)



Product Description

Recognizes a phosphor-protein of 45 kDa, 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 Wilm s tumors. Weak cytoplasmic staining is observed in several non-muscle tissues, including glandular epithelium and also in rhabdomyosarcomas, neuroblastomas, Ewing s sarcomas and alveolar soft part sarcomas.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the <u>CF® Dye Brochure</u> for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

Stock status: Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email <u>order@biotium.com</u> to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 0191, Anti-MyoD1 (5.8A)

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Email: techsupport@biotium.com

Product attributes

Product attributes			
Antibody number	#0191		
Antibody reactivity (target)	MyoD1		
Antibody type	Primary		
Host species	Mouse		
Clonality	Monoclonal		
Clone	5.8A		
Isotype	IgG1, kappa		
Molecular weight	45 kDa		
Synonyms	bHLHc1, Class C basic helix-loop-helix protein 1, Myoblast determination protein 1, Myogenic differentiation 1, Myogenic factor 3 (Myf-3), Myogenin D1, PUM		
Human gene symbol	MYOD1		
Entrez gene ID	4654		
SwissProt	P15172		
Unigene	181768		
Immunogen	Recombinant mouse MyoD1 protein		
Antibody target cellular localization	Nucleus		
Species reactivity	Chicken, Human, Mouse, Rat		
Antibody application notes	For coating for ELISA, order Ab without BSA, Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody. Recommended starting concentrations for titration are 1-2 ug/mL for most applications, or 1 ug/million cells/100 uL for flow cytometry. Only nuclear staining should be considered as evidence of skeletal muscle differentiation, Optimal dilution for a specific application should be determined by user		
Positive control	Rhabdomyosarcoma		
Shipping condition	Room temperature		
Storage Conditions	Store at 2 to 8 $^\circ$ C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 $^\circ$ C		
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended		
Regulatory status	For research use only (RUO)		
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide		
Antibody research areas	Cancer, Developmental biology		
Product origin	Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot.		
Cell/tissue expression	Muscle		
Tumor expression	Sarcoma		

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	CF®405S Features
BNC88	CF®488A	490/515	488	GFP, FITC	CF®488A Features
BNC68	CF®568	562/583	532, 561	RFP, TRITC	CF®568 Features
BNC94	CF®594	593/614	561	Texas Red®	CF®594 Features
BNC40	CF®640R	642/662	633-640	Cy®5	CF®640R Features
BNC47	CF®647	650/665	633-640	Cy®5	CF®647 Features
BNC74	CF®740	742/767	633-685	775/50	CF®740 Features
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	

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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. |

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