#13812

MyoD1 (D8G3) XP[®] Rabbit mAb



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3 Trask Lane | Danvers | Massachusetts | 01923 | USA

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:	
VV, IF-IC	п	Endogenous	45	Rabbit Igg	#P15172	4054	
Product Usage Information		Application Western Blotting Immunofluorescence	(Immunocytochemi	stry)		Dilution 1:1000 1:400	
Storage		Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 μg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at –20°C. <i>Do not aliquot the antibody.</i>					
Specificity/Sens	:y/Sensitivity MyoD1 (D8G3) XP [®] Rabbit mAb recognizes endogenous levels of total MyoD1 protein.						
Source / Purific	cation Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Gly190 of human MyoD1 protein.					rresponding to	
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 (1). 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 (2,3). 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 (4-6). Additional influences on muscle development include signal transduction through MAPK, PI3K/Akt, myostatin, NF-κB, and mTOR signaling pathways (5-7).					
Background Re	ferences	1. Berkes, C.A. and Tap 2. Tapscott, S.J. (2005) 3. Davis, R.L. et al. (198 4. de la Serna, I.L. et a 5. Aziz, A. et al. (2010) 6. Guttridge, D.C. (2000 7. Ge, Y. and Chen, J. (2010)	Descott, S.J. (2005) Ser Development 132, 2 87) Cell 51, 987-1000 I. (2001) Nat Genet 2 Epigenetics 5, 691-5 4) Curr Opin Clin Nu 2012) J Biol Chem 28	min Cell Dev Biol 16, 585 2685-95. 27, 187-90. 5. <i>itr Metab Care</i> 7, 443-50 7, 43928-35.	5-95.).		
Species Reactiv	ity	Species reactivity is de	etermined by testing	ı in at least one approve	d application (e.g., v	western blot).	
Western Blot B	uffer	IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.					
Applications Ke	y	W: Western Blotting IF-IC: Immunofluorescence (Immunocytochemistry)					
Cross-Reactivity	у Кеу	H: Human					
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