

Rabbit MYOG Polyclonal Antibody | anti-MYOG antibody

MYOG Antibody

CATALOG # AAA327446	HOST Rabbit	REACTIVITY Human, Mouse, Rat	APPLICATIONS ELISA, Western Blot
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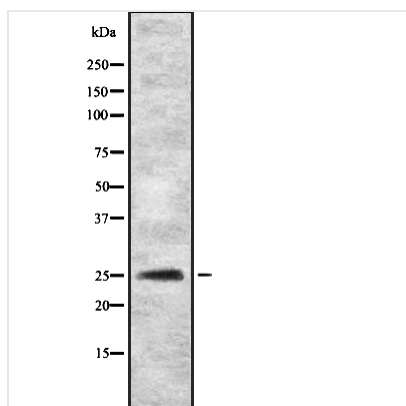
PRODUCT SYNONYMS

MYOG; Polyclonal Antibody; MYOG Antibody; bHLHc3; cb553; Class C basic helix-loop-helix protein 3; MYF 4; Myf-4; MYF4; MYOG_HUMAN; Myogenic factor 4; Myogenic factor 4 myogenin; Myogenin; Myogenin myogenin factor 4; OTTHUMP00000039094; anti-MYOG antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	MYOG antibody detects endogenous levels of total MYOG
Purity/Purification	Peptide affinity purification
Form/Format	Liquid; Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	224
Applicable Applications for anti-MYOG antibody	ELISA, WB (Western Blot)
Immunogen	A synthesized peptide derived from human MYOG, corresponding to a region within the C-Terminal amino acids.
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



WB (Western Blot)

Western blot analysis of MYOG using HeLa whole cell lysates

ADDITIONAL INFORMATION

Related Product Information for anti-MYOG antibody	Function: Acts as a transcriptional activator that promotes transcription of muscle-specific target genes and plays a role in muscle differentiation, cell cycle exit and muscle atrophy. Essential for the development of functional embryonic skeletal fiber muscle differentiation. However is dispensable for postnatal skeletal muscle growth; phosphorylation by CAMK2G inhibits its transcriptional activity in respons to muscle activity. Required for the recruitment of the FACT complex to muscle-specific promoter regions, thus promoting gene expression initiation. During terminal myoblast differentiation, plays a role as a strong activator of transcription at loci with an open chromatin structure previously initiated by MYOD1. Together with MYF5 and MYOD1, co-occupies muscle-specific gene promoter core regions during myogenesis. Cooperates also with myocyte-specific enhancer factor MEF2D and BRG1-dependent recruitment of SWI/SNF chromatin-remodeling enzymes to alter chromatin structure at myogenic late gene promoters. Facilitates cell cycle exit during terminal muscle differentiation through the up-regulation of miR-20a expression, which in turn represses genes involved in cell cycle progression. Binds to the E-box containing (E1) promoter region of the miR-20a gene. Plays also a role in preventing reversal of muscle cell differentiation. Contributes to the atrophy-related gene expression in adult denervated muscles. Induces fibroblasts to differentiate into myoblasts (By similarity). Subunit Structure: Homodimer and heterodimer with E12; heterodimerization enhances MYOG DNA-binding and transcriptional activities. Interacts with SMARCA4/BRG1/BAF190A. Interacts (via C-terminal region) with SSRP1 and SUPT16H; the interaction is indicative of an interaction with the FACT complex (By similarity). Interacts with CSRP3. Post-translational Modifications: Phosphorylated by CAMK2G on threonine and serine amino acids in a muscle activity-dependent manner. Phosphorylation of Thr-87 impairs both DNA-binding and trans-activation functions in contracting muscles (By similarity).
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NCBI AND UNIPROT INFORMATION

NCBI GI #	18765727
NCBI GeneID	4656
NCBI Accession #	NP_002470.2
NCBI GenBank Nucleotide #	NM_002479.5
UniProt Accession #	P15173; Q53XW6
Molecular Weight	25kDa
NCBI Official Full Name	myogenin
NCBI Official Synonym Full Names	myogenin
NCBI Official Symbol	MYOG
NCBI Official Synonym Symbols	MYF4; myf-4; bHLHc3
NCBI Protein Information	myogenin
UniProt Protein Name	Myogenin
UniProt Gene Name	MYOG
UniProt Synonym Gene Names	BHLHC3; MYF4; bHLHc3; Myf-4

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.