ARG59561
anti-MyoD antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes MyoD
Tested Reactivity	Hu
Tested Application	IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	MyoD
Species	Human
Immunogen	Synthetic peptide derived from Human MyoD.
Conjugation	Un-conjugated
Alternate Names	PUM; MYF3; Myoblast determination protein 1; bHLHc1; Myogenic factor 3; MYOD; Myf-3; Class C basic helix-loop-helix protein 1

Application Instructions

Application table

Application	Dilution
IHC-P	1:50 - 1:200
WB	1:500 - 1:1000

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

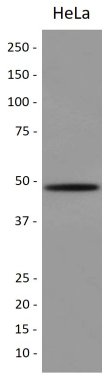
Properties

Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.4), 150mM NaCl, 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	MYOD1
Gene Full Name	myogenic differentiation 1
Background	This gene encodes a nuclear protein that belongs to the basic helix-loop-helix family of transcription factors and the myogenic factors subfamily. It regulates muscle cell differentiation by inducing cell cycle arrest, a prerequisite for myogenic initiation. The protein is also involved in muscle regeneration. It activates its own transcription which may stabilize commitment to myogenesis. [provided by RefSeq, Jul 2008]
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). [UniProt]
Calculated Mw	35 kDa
PTM	Phosphorylated by CDK9. This phosphorylation promotes its function in muscle differentiation. Acetylated by a complex containing EP300 and PCAF. The acetylation is essential to activate target genes. Conversely, its deacetylation by SIRT1 inhibits its function (By similarity). Ubiquitinated on the N-terminus; which is required for proteasomal degradation. Methylation at Lys-104 by EHMT2/G9a inhibits myogenic activity. [UniProt]
Cellular Localization	Nucleus. [UniProt]

Images



ARG59561 anti-MyoD antibody WB image

Western blot: HeLa cell lysate stained with ARG59561 anti-MyoD antibody.