

**Myogenin**  
**Rabbit Monoclonal antibody(Mab)**  
**Catalog # AD80388****Specification**

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**Myogenin - Product info**

Application	<b>IHC-P</b>
Primary Accession	<a href="#">P15173</a>
Reactivity	<b>Human</b>
Host	<b>Rabbit</b>
Clonality	<b>Monoclonal</b>
Calculated MW	<b>25037</b>

**Myogenin - Additional info**Gene ID **4656****Other Names**

Myogenin, Class C basic helix-loop-helix protein 3, bHLHc3, Myogenic factor 4, Myf-4, MYOG, BHLHC3, MYF4

**Dilution**

IHC-P~~Ready-to-use

**Storage**

Maintain refrigerated at 2-8°C

**Myogenin - Protein Information****Name** MYOG**Synonyms****Function****BHLHC3, MYF4**

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 response 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. Also cooperates 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. Also plays 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).

#### Cellular Location

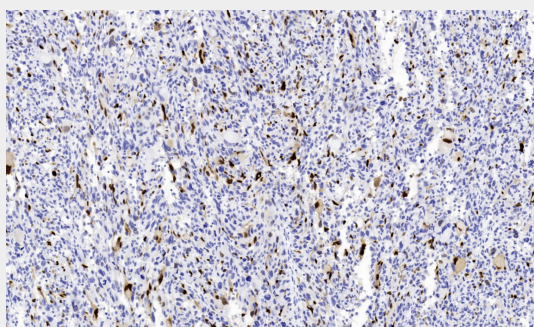
**Nucleus.** Note=Recruited to late myogenic gene promoter regulatory sequences with SMARCA4/BRG1/BAF190A and SWI/SNF chromatin-remodeling enzymes to promote chromatin-remodeling and transcription initiation in developing embryos.

### Myogenin - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Myogenin - Images



Alveolar rhabdomyosarcoma

