

### **Myogenin Polyclonal Antibody**

**Catalog # AP71127** 

#### **Specification**

# **Myogenin Polyclonal Antibody - Product Information**

Application WB, IHC-P Primary Accession P15173

Reactivity Human, Mouse, Rat

Host Rabbit Clonality Polyclonal

# **Myogenin Polyclonal Antibody - Additional Information**

**Gene ID** 4656

**Other Names** 

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

**Dilution** 

WB~~1:1000 IHC-P~~N/A

#### **Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

#### **Storage Conditions**

-20°C

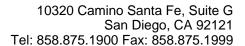
#### **Myogenin Polyclonal Antibody - Protein Information**

Name MYOG

Synonyms BHLHC3, MYF4

### **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. 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**

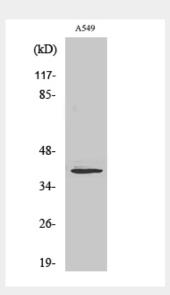
Nucleus. Note=Recruited to late myogenic gene promoter regulatory sequences with SMARCA4/BRG1/BAF190A and SWI/SNF chromatin-remodeling enzymes to promote chromatin-remodeling and transcription initiation in developing embryos.

### **Myogenin Polyclonal Antibody - Protocols**

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

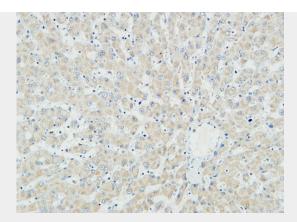
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## Myogenin Polyclonal Antibody - Images

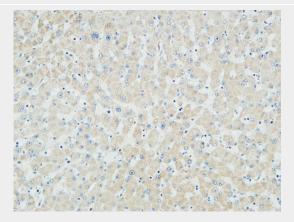


Western Blot analysis of various cells using Myogenin Polyclonal Antibody cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003,Inventbiotech,MN,USA).

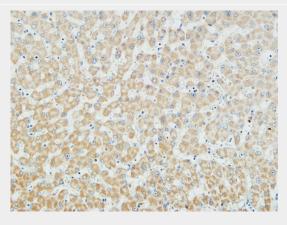




Immunohistochemical analysis of paraffin-embedded Human liver. 1, Antibody was diluted at 1:100(4°,overnight). 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).

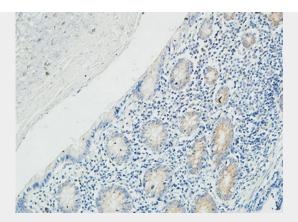


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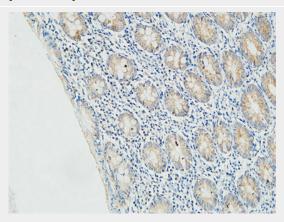


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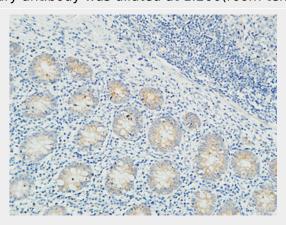




Immunohistochemical analysis of paraffin-embedded Human Fallopian tube. 1, Antibody was diluted at 1:100(4°,overnight). 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).



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