

Datasheet for ABIN700660  
**anti-Myogenin antibody**

## 3 Images

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## Overview

Quantity:	100 µL
Target:	Myogenin (MYOG)
Reactivity:	Human, Mouse, Rat, Pig, Cow, Chicken
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Myogenin antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunofluorescence (Paraffin-embedded Sections) (IF (p))

## Product Details

Immunogen:	KLH conjugated synthetic peptide derived from human MYOG/Myogenin
Isotype:	IgG
Cross-Reactivity:	Cow, Human, Mouse, Rat
Predicted Reactivity:	Pig
Purification:	Purified by Protein A.

## Target Details

Target:	Myogenin (MYOG)
Alternative Name:	Myogenin ( <a href="#">MYOG Products</a> )
Background:	Synonyms: MYF4, myf-4, bHLHc3, Myogenin, Class C basic helix-loop-helix protein 3, Myogenic

## Target Details

factor 4, MYOG

Background: 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. 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).

Molecular Weight: 25kDa

Gene ID: 4656

UniProt: [P15173](#)

Pathways: [Regulation of Muscle Cell Differentiation, Skeletal Muscle Fiber Development](#)

## Application Details

Application Notes: WB(1:100-500)  
Optimal working dilution should be determined by the investigator.

Restrictions: For Research Use only

## Handling

Format: Liquid

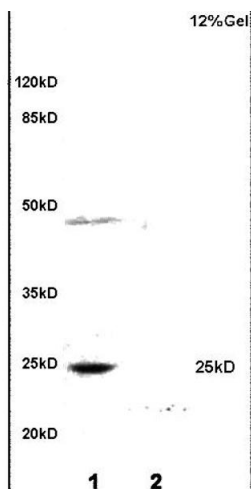
Concentration: 1 µg/µL

Buffer: Aqueous buffered solution containing 1 % BSA, 50 % glycerol and 0.09 % sodium azide.

## Handling

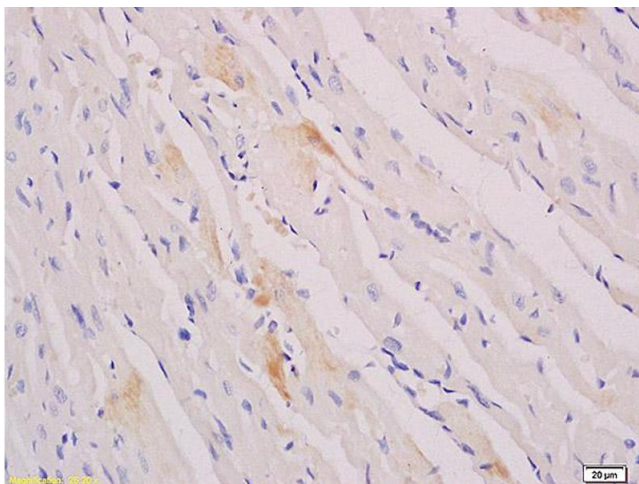
Preservative:	Sodium azide
Precaution of Use:	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store at -20°C for 12 months.
Expiry Date:	12 months

## Images



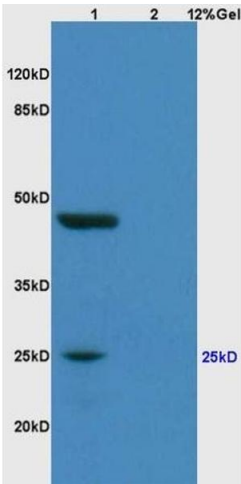
### SDS-PAGE

**Image 1.** Formalin-fixed and paraffin embedded rat heart tissue labeled with Anti MYOG/MYOGENIN Polyclonal Antibody, Unconjugated (ABIN700660) at 1:200 followed by conjugation to the secondary antibody and DAB staining.



### Immunohistochemistry

**Image 2.** Lane 1: rat heart lysates Lane 2: mouse skeletal muscle lysates probed with Anti MYOG/MYOGENIN Polyclonal Antibody, Unconjugated (ABIN700660) at 1:200 in 4 °C. Followed by conjugation to secondary antibody at 1:3000 90min in 37 °C. Predicted band 25kD. Observed band size: 25kD.



SDS-PAGE

**Image 3.** Lane 1: human colon carcinoma lysates Lane 2: rat brain lysates probed with Anti MYOG/Myogenin Polyclonal Antibody, Unconjugated (ABIN700660) at 1:200 in 4 °C. Followed by conjugation to secondary antibody at 1:3000 90min in 37 °C. Predicted band 25kD. Observed band size: 25kD,50kD.