

MYOG Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP14940c**Specification****MYOG Antibody (Center) Blocking Peptide -
Product Information**Primary Accession [P15173](#)**MYOG Antibody (Center) Blocking Peptide -
Additional Information****Gene ID** 4656**Other Names**Myogenin, Class C basic helix-loop-helix
protein 3, bHLHc3, Myogenic factor 4,
Myf-4, MYOG, BHLHC3, MYF4**Format**Peptides are lyophilized in a solid powder
format. Peptides can be reconstituted in
solution using the appropriate buffer as
needed.**Storage**Maintain refrigerated at 2-8°C for up to 6
months. For long term storage store at
-20°C.**Precautions**This product is for research use only. Not
for use in diagnostic or therapeutic
procedures.**MYOG Antibody (Center) Blocking Peptide -
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**MYOG Antibody (Center) Blocking Peptide
- Background**Myogenin is a muscle-specific transcription
factor that can induce myogenesis in a variety
of cell types in tissue culture. It is a member of
a large family of proteins related by
sequence homology, the helix-loop-helix (HLH)
proteins. It is essential for the development of
functional skeletal muscle. [provided
by RefSeq].**MYOG Antibody (Center) Blocking Peptide
- References**Gao, X., et al. J. Cell. Biochem.
110(1):162-170(2010) Yerges, L.M., et al. J.
Bone Miner. Res.
24(12):2039-2049(2009) Ramamoorthy, S., et
al. Am. J. Physiol. Endocrinol. Metab. 297 (2),
E392-E401 (2009) Nanni, P., et al. Mol. Cancer
Ther. 8(4):754-761(2009) Gong, C., et al. Genes
Dev. 23(1):54-66(2009)

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).

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.

**MYOG Antibody (Center) Blocking Peptide
- Protocols**

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

- [Blocking Peptides](#)