

# Rabbit Anti-phospho-MYF5 (phospho Ser49) antibody

# SL8200R

<b>Product Name:</b>	phospho-MYF5 (phospho Ser49)
<b>Chinese Name:</b>	磷酸化生肌决定因子Myf5抗体
Alias:	Myf5 (phospho S49); Myf5 (phospho Ser49); p-Myf5(phospho S49); p-Myf5(phospho Ser49); Myf-5 bHLHc2; Class C basic helix loop helix protein 2; Class C basic helix-loop-helix protein 2; Myf 5; Myf-5; Myf5; MYF5 HUMAN; Myogenic factor 5.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Horse,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:50-200 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	28kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthesised phosphopeptide derived from human MYF5 around the phosphorylation site of Ser49:LQG(p-S)D
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Differentiation of myogenic cells is regulated by multiple positively and negatively

acting factors. One well characterized family of helix-loop-helix (HLH) proteins known to play an important role in the regulation of muscle cell development include Myo D, myogenin, Myf-5 and Myf-6 (also designated MRF-4 or herculin). Of interest, most muscle cells express either Myo D or Myf-5 in the committed state, but when induced to differentiate, all turn on expression of myogenin. Myo D transcription factors form heterodimers with products of a more widely expressed family of bHLH genes, the E family, which consists of at least three distinct genes: E2A, IF2 and HEB. Myo D-E heterodimers bind avidly to consensus (CANNTG) E box target sites that are functionally important elements in the upstream regulatory sequences of many muscle-specific terminal differentiation genes.

# Function:

Involved in muscle differentiation (myogenic factor). Induces fibroblasts to differentiate into myoblasts. Probable sequence specific DNA-binding protein.

#### Subunit:

Efficient DNA binding requires dimerization with another bHLH protein.

#### **Subcellular Location:**

Nucleus.

# Similarity:

Contains 1 bHLH (basic helix-loop-helix) domain.

### **SWISS:**

P13349

#### Gene ID:

4617

## Database links:

Entrez Gene: 4617Human

Entrez Gene: 17877Mouse

Entrez Gene: 299766Rat

Omim: 159990Human

SwissProt: P13349Human

SwissProt: P24699Mouse

Unigene: 178023Human

Unigene: 4984Mouse

# **Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

yf5是MyoD基因家族的一员,该家族的共同结构特点是具有1个保守的中央蛋白基序(motif),大小为80个氨基酸,称为碱性螺旋-环-

螺旋(bHLH), bHLH高度保守,其中Basic结构是HLH螺旋结构的延伸,也是这一家族蛋白与DNA相互作用的区域,而HLH螺旋结构则是与其他因子相互作用的位点,即调控的重要区域。

生肌决定因子(MyoD)基因家族控制着肌细胞的增殖和分化,与肌纤维的数量、大小有着密切的关系,因而对肉质和风味有非常重要的作用,MyoD基因家族可编码4种不同的转录因子,分别为MyoD(Myf3)、Myogenin(MyoG)、Myf5、Myf6或MRF4,它们各自或协同控制着骨骼肌生成方面的关键调节因子。