



Rabbit Anti-phospho-MyoD1 (Ser200) antibody

SL5499R

Product Name:	phospho-MyoD1 (Ser200)
Chinese Name:	磷酸化肌原调节蛋白抗体
Alias:	MyoD1 (phospho Ser200); MyoD1 (phospho S200); p-MyoD1 (phospho S200); MYOD1(phospho S200);Myogenic differentiation 1; AI503393; bHLHc1; MD1; MGC156574; MYF3; MYOD; MYOD1; PUM; MYOD1_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Pig,Cow,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	34kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated Synthesised phosphopeptide derived from human MyoD1 around the phosphorylation site of Ser200:DA(p-S)SP
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:	MyoD1 belongs to the basic helix-loop-helix family of transcription factors and the myogenic factors subfamily. It regulates muscle cell differentiation by inducing cell

cycle arrest, a prerequisite for myogenic initiation. Myod1 is essential for repair of damaged tissue. It activates its own transcription which may stabilize commitment to myogenesis.

Function:

Involved in muscle differentiation (myogenic factor). Induces fibroblasts to differentiate into myoblasts. Activates muscle-specific promoters. Interacts with and is inhibited by the twist protein. This interaction probably involves the basic domains of both proteins (By similarity).

Subunit:

Efficient DNA binding requires dimerization with another bHLH protein. Seems to form active heterodimers with ITF-2. Interacts with SUV39H1 and CDK9. Interacts with DDX5 (By similarity).

Subcellular Location:

Nucleus.

Post-translational modifications:

Phosphorylated by CDK9. This phosphorylation promotes its function in muscle differentiation.

Acetylated by a complex containing EP300 and PCAF. The acetylation is essential to activate target genes. Conversely, its deacetylation by SIRT1 inhibits its function (By similarity).

Ubiquitinated on the N-terminus; which is required for proteasomal degradation.

Similarity:

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

SWISS:

P15172

Gene ID:

4654

Database links:

[Entrez Gene: 374048](#)Chicken

[Entrez Gene: 281938](#)Cow

[Entrez Gene: 4654](#)Human

[Entrez Gene: 17927](#)Mouse

[Entrez Gene: 407604](#)Pig

[Entrez Gene: 337868](#)Rat

[Entrez Gene: 443405](#)Sheep

[Olim: 159970](#)Human

[SwissProt: P16075](#)Chicken

[SwissProt: Q7YS82](#)Cow

[SwissProt: P15172](#)Human

[SwissProt: P10085](#)Mouse

[SwissProt: P49811](#)Pig

[SwissProt: Q02346](#)Rat

[SwissProt: P29331](#)Sheep

[Unigene: 181768](#)Human

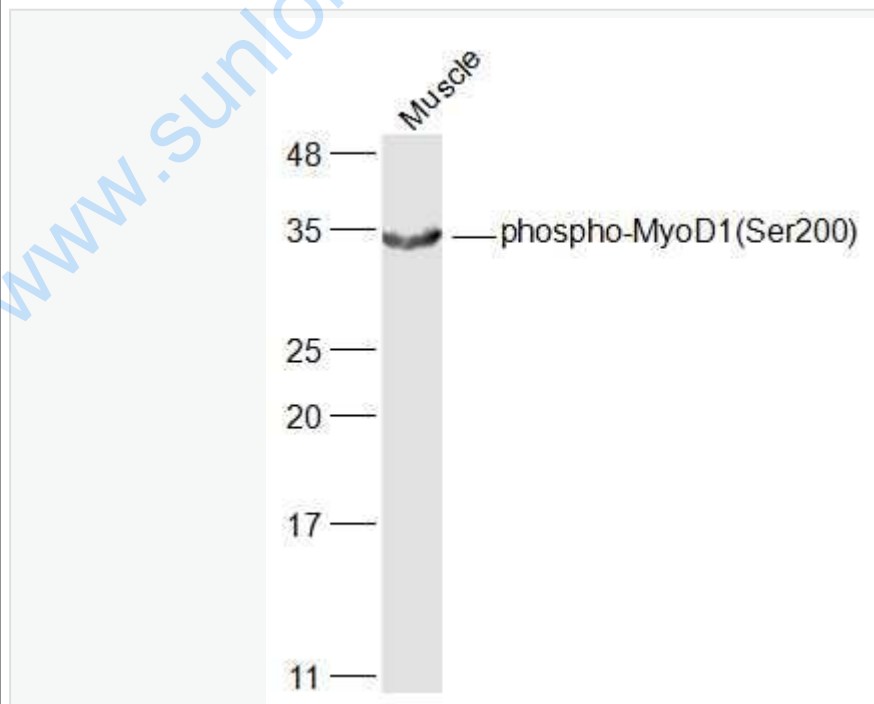
[Unigene: 1526](#)Mouse

[Unigene: 9493](#)Rat

Important Note:

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

Picture:



Sample:

Muscle (Mouse) Lysate at 40 ug

Primary: Anti-phospho-MyoD1(Ser200) (SL5499R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 34 kD

Observed band size: 34 kD

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