

# Myf-6 (D-20): sc-31951

## BACKGROUND

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 includes MyoD, myogenin, Myf-5 and Myf-6 (also designated MRF-4 or herculin). Of interest, most muscle cells express either MyoD or Myf-5 in the committed state, but when induced to differentiate, all turn on expression of myogenin. MyoD 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. MyoD-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.

## CHROMOSOMAL LOCATION

Genetic locus: MYF6 (human) mapping to 12q21.31; Myf6 (mouse) mapping to 10 D1.

## SOURCE

Myf-6 (D-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Myf-6 of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-31951 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-31951 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## APPLICATIONS

Myf-6 (D-20) is recommended for detection of Myf-6 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Myf-6 (D-20) is also recommended for detection of Myf-6 in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for Myf-6 siRNA (h): sc-43521, Myf-6 siRNA (m): sc-43522, Myf-6 shRNA Plasmid (h): sc-43521-SH, Myf-6 shRNA Plasmid (m): sc-43522-SH, Myf-6 shRNA (h) Lentiviral Particles: sc-43521-V and Myf-6 shRNA (m) Lentiviral Particles: sc-43522-V.

Myf-6 (D-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

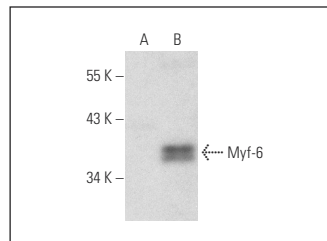
Molecular Weight of Myf-6: 30 kDa.

Positive Controls: Myf-6 (h2): 293T Lysate: sc-176122.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



Myf-6 (D-20): sc-31951. Western blot analysis of Myf-6 expression in non-transfected: sc-117752 (A) and human Myf-6 transfected: sc-176122 (B) 293T whole cell lysates.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **Myf-6 (G-7): sc-514379**, our highly recommended monoclonal alternative to Myf-6 (D-20).