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# Myf-6 (h2): 293T Lysate: sc-176122

## 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.

## REFERENCES

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6. Thayer, M.J. and Weintraub, H. 1993. A cellular factor stimulates the DNA-binding activity of MyoD and E47. *Proc. Natl. Acad. Sci. USA* 90: 6483-6487.
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8. Hollenberg, S.M., Cheng, P.F. and Weintraub, H. 1993. Use of a conditional MyoD transcription factor in studies of MyoD *trans*-activation and muscle determination. *Proc. Natl. Acad. Sci. USA* 90: 8028-8032.
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## CHROMOSOMAL LOCATION

Genetic locus: MYF6 (human) mapping to 12q21.31.

## PRODUCT

Myf-6 (h2): 293T Lysate represents a lysate of human Myf-6 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

## RESEARCH USE

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

## APPLICATIONS

Myf-6 (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive Myf-6 antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

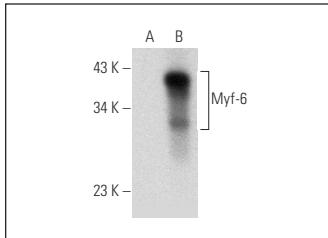
Myf-6 (G-7): sc-514379 is recommended as a positive control antibody for Western Blot analysis of enhanced human Myf-6 expression in Myf-6 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgG<sub>κ</sub> BP-HRP: sc-516102 or m-IgG<sub>κ</sub> BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

## DATA



Myf-6 (G-7); sc-514379. 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 -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

## PROTOCOLS

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