SANTA CRUZ BIOTECHNOLOGY, INC.

# MyoD (C-20): sc-304

SANTA CRUZ BIOTECHNOLOGY

*The Power to Question*

## 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: MYOD1 (human) mapping to 11p15.1; Myod1 (mouse) mapping to 7 B4.

## SOURCE

MyoD (C-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of MyoD of mouse origin.

## PRODUCT

Each vial contains 100 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-304 X, 100 µg/0.1 ml.

Blocking peptide available for competition studies, sc-304 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

## APPLICATIONS

MyoD (C-20) is recommended for detection of MyoD of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)]. MyoD (C-20) is also recommended for detection of MyoD in additional species, including canine and porcine.

Suitable for use as control antibody for MyoD siRNA (h): sc-35990, MyoD siRNA (m): sc-35991, MyoD shRNA Plasmid (h): sc-35990-SH, MyoD shRNA Plasmid (m): sc-35991-SH, MyoD shRNA (h) Lentiviral Particles: sc-35990-V and MyoD shRNA (m) Lentiviral Particles: sc-35991-V.

MyoD (C-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of MyoD: 45 kDa.

Positive Controls: A-673 nuclear extract: sc-2128 or Sol8 cell lysate: sc-2249 or Sol8 nuclear extract: sc-2157.

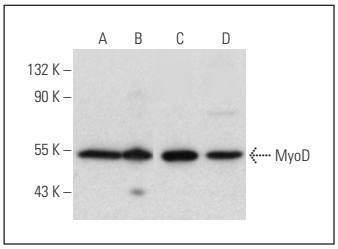
## STORAGE

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

## RESEARCH USE

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

## DATA




MyoD (C-20): sc-304. Western blot analysis of MyoD expression in A-673 (**A**) and Sol8 (**B**) nuclear extracts and C2C12 (**C**) and Sol8 (**D**) whole cell lysates.

## SELECT PRODUCT CITATIONS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