

# MOX-2 (H-95): sc-292632

## BACKGROUND

Closely related homeobox proteins, MOX-1 and MOX-2, belong to a family of nonclustered, diverged homeobox genes that are expressed in overlapping patterns in the paraxial mesoderm and its derivatives. MOX-1 and MOX-2 function transiently in the formation of mesodermal and mesenchymal derivatives. MOX-1 and MOX-2 are implicated in the early steps of mesoderm formation during gastrulation. In addition, the MOX proteins are also involved in somatic differentiation. Significantly, MOX-1 associates more strongly with Pax1, whereas MOX-2 preferentially associates with Pax3. Specifically, expression of MOX-2, also known as Mesenchyme homeobox 2 and GAX, has been shown to be critical in axial skeleton development. MOX-2 is not needed for the migration of myogenic precursors into the limb bud, but it is essential for normal appendicular muscle formation and for the normal regulation of myogenic genes. MOX-2 is expressed in placental tissue. The human MEOX2 gene maps to chromosome 7p21.2 and encodes the MOX-2 protein. Mutations in the gene may be involved in craniofacial and/or skeletal abnormalities.

## CHROMOSOMAL LOCATION

Genetic locus: MEOX2 (human) mapping to 7p21.2; Meox2 (mouse) mapping to 12 A3.

## SOURCE

MOX-2 (H-95) is a rabbit polyclonal antibody raised against amino acids 94-188 mapping within an internal region of MOX-2 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-292632 X, 200 µg/0.1 ml.

## APPLICATIONS

MOX-2 (H-95) is recommended for detection of MOX-2 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).

MOX-2 (H-95) is also recommended for detection of MOX-2 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for MOX-2 siRNA (h): sc-106233, MOX-2 siRNA (m): sc-149520, MOX-2 shRNA Plasmid (h): sc-106233-SH, MOX-2 shRNA Plasmid (m): sc-149520-SH, MOX-2 shRNA (h) Lentiviral Particles: sc-106233-V and MOX-2 shRNA (m) Lentiviral Particles: sc-149520-V.

MOX-2 (H-95) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

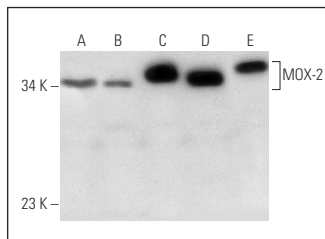
Molecular Weight of MOX-2: 34 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, NIH/3T3 whole cell lysate: sc-2210 or A-431 whole cell lysate: sc-2201.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



MOX-2 (H-95): sc-292632. Western blot analysis of MOX-2 expression in JAR (A), COLO 205 (B), RAW 264.7 (C), MDA-MB-231 (D) and A-431 (E) 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.

## RESEARCH USE

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

## PROTOCOLS

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


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Try **MOX-2 (A-8): sc-376748** or **MOX-2 (F-7): sc-390075**, our highly recommended monoclonal alternatives to MOX-2 (H-95).