

# LMO7 (C-16): sc-49826

## BACKGROUND

The LIM-only (LMO) proteins are nuclear factors characterized by a conserved LIM domain. The LIM domain contains a cysteine-rich zinc-binding motif, present in a variety of transcription factors, including the LIM homeobox (LHX) proteins expressed in the central nervous system. The deduced LMO7 protein is comprised of 1,349 amino acid residues and contains a characteristic zinc finger domain and a 3' UTR which possesses a short interspersed nucleotide element (SINE). RT-PCR detects predominant expression of LMO7 in heart, lung, skeletal muscle and kidney, moderate expression in liver, ovary, brain, pancreas and testis, and little or no expression in spleen. Research indicates that LMO7 is an afadin- and  $\alpha$ -actinin-binding protein that connects the nectin-afadin and E-cadherin-catenin systems through  $\alpha$ -actinin.

## CHROMOSOMAL LOCATION

Genetic locus: LMO7 (human) mapping to 13q22.2; Lmo7 (mouse) mapping to 14 E2.3.

## SOURCE

LMO7 (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of LMO7 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g 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-49826 X, 200  $\mu$ g/0.1 ml.

Blocking peptide available for competition studies, sc-49826 P, (100  $\mu$ g 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

LMO7 (C-16) is recommended for detection of LMO7 isoforms 1-4 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

LMO7 (C-16) is also recommended for detection of LMO7 isoforms 1-4 in additional species, including equine and canine.

Suitable for use as control antibody for LMO7 siRNA (h): sc-60954, LMO7 siRNA (m): sc-60955, LMO7 shRNA Plasmid (h): sc-60954-SH, LMO7 shRNA Plasmid (m): sc-60955-SH, LMO7 shRNA (h) Lentiviral Particles: sc-60954-V and LMO7 shRNA (m) Lentiviral Particles: sc-60955-V.

LMO7 (C-16) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

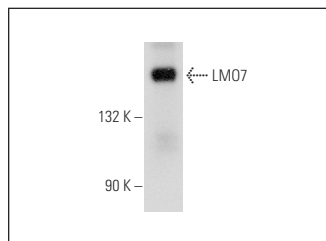
Molecular Weight of LMO7: 180 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

## 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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> Mounting Medium: sc-24941.

## DATA



LMO7 (C-16): sc-49826. Western blot analysis of LMO7 expression in HeLa whole cell lysate.

## 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.

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Satisfaction  
Guaranteed

Try **LMO7 (B-7): sc-376807** or **LMO7 (C-5): sc-365515**, our highly recommended monoclonal alternatives to LMO7 (C-16).