# LMO7 (H-300): sc-98423



The Power to Question

## **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.

# **REFERENCES**

- Putilina, T., et al. 1998. Analysis of a human cDNA containing a tissuespecific alternatively spliced LIM domain. Biochem. Biophys. Res. Commun. 252: 433-439.
- 2. Cenciarelli, C., et al. 1999. Identification of a family of human F-box proteins. Curr. Biol. 9: 1177-1179.

#### CHROMOSOMAL LOCATION

Genetic locus: LM07 (human) mapping to 13q22.2; Lmo7 (mouse) mapping to 14 E2.3.

## **SOURCE**

LM07 (H-300) is a rabbit polyclonal antibody raised against amino acids 1265-1564 mapping near the C-terminus of LM07 of human origin.

### **PRODUCT**

Each vial contains 200  $\mu g$  lgG 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-98423 X, 200  $\mu g$ /0.1 ml.

## **APPLICATIONS**

LM07 (H-300) is recommended for detection of LM07 isoforms 1-4 of human and, to a lesser extent, mouse and rat 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).

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.

LM07 (H-300) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

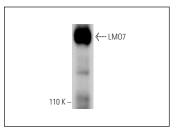
Molecular Weight of LM07: 180 kDa.

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 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**



LM07 (H-300): sc-98423. Western blot analysis of LM07 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.

## **RESEARCH USE**

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

#### **PROTOCOLS**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **LM07 (B-7):** sc-376807 or **LM07 (C-5):** sc-365515, our highly recommended monoclonal alternatives to LM07 (H-300).

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com