

LMO7 (C-5): sc-365515

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 α -actinin-binding protein that connects the nectin-afadin and E-cadherin-catenin systems through α -actinin.

REFERENCES

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3. Nagase, T., et al. 1999. Prediction of the coding S sequences of 100 new cDNA clones from brain which code for large proteins *in vitro*. *DNA Res.* 5: 355-364.
4. Rozenblum, E., et al. 2002. A genomic map of a 6 Mb region at 13q21-q22 implicated in cancer development: identification and characterization of candidate genes. *Hum. Genet.* 110: 111-121.
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7. Jin, J., et al. 2004. Systematic analysis and nomenclature of mammalian F-box proteins. *Genes Dev.* 18: 2573-2580.
8. Ooshio, T., et al. 2004. Involvement of LMO7 in the association of two cell-cell adhesion molecules, Nectin and E-cadherin, through afadin and α -actinin in epithelial cells. *J. Biol. Chem.* 279: 31365-31373.

CHROMOSOMAL LOCATION

Genetic locus: LMO7 (human) mapping to 13q22.2.

SOURCE

LMO7 (C-5) is a mouse monoclonal antibody raised against amino acids 1265-1564 mapping near the C-terminus of LMO7 of human origin.

PRODUCT

Each vial contains 200 μ g IgG_{2a} kappa light chain 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-365515 X, 200 μ g/0.1 ml.

APPLICATIONS

LMO7 (C-5) is recommended for detection of LMO7 isoforms 1-4 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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 shRNA Plasmid (h): sc-60954-SH and LMO7 shRNA (h) Lentiviral Particles: sc-60954-V.

LMO7 (C-5) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

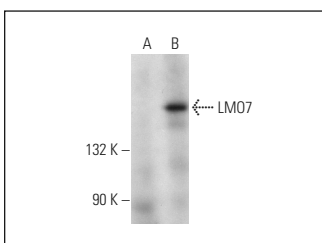
Molecular Weight of LMO7: 180 kDa.

Positive Controls: LMO7 (h): 293 Lysate: sc-129020, MDA-MB-231 cell lysate: sc-2232 or HeLa whole cell lysate: sc-2200.

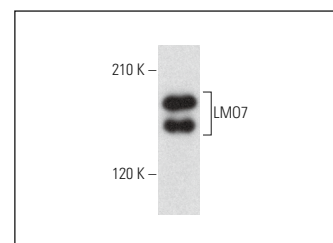
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



LMO7 (C-5): sc-365515. Western blot analysis of LMO7 expression in non-transfected: sc-110760 (A) and human LMO7 transfected: sc-129020 (B) 293 whole cell lysates.



LMO7 (C-5): sc-365515. Western blot analysis of LMO7 expression in MDA-MB-231 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 for detailed protocols and support products.