

LMO3 (1A8): sc-517019

BACKGROUND

LMO3 (LIM domain only 3), also known as RBTN3 (Rhombotin-3), RBTNL2 or RHOM3, is a 145 amino acid protein that contains two LIM zinc-binding domains and may be involved in transcriptional regulation events in tissues throughout the body. Aberrant expression of LMO3 is associated with the genesis and progression of human neuroblastoma, suggesting a role for LMO3 in oncogenesis. The gene encoding LMO3 maps to human chromosome 12p12.3, which encodes over 1,100 genes and comprises approximately 4.5% of the human genome. Chromosome 12 is associated with a variety of diseases and afflictions, including hypochondrogenesis, achondrogenesis, Kniest dysplasia, Noonan syndrome and Trisomy 12p, which causes facial developmental defects and seizure disorders.

REFERENCES

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- Susa, T., et al. 2009. Highly related LIM factors, LMO1, LMO3 and LMO4, play different roles in the regulation of pituitary glycoprotein hormone common α subunit gene. *Biosci. Rep.* 30: 51-58.
- Hui, L., et al. 2009. The oncoprotein LMO3 interacts with calcium- and integrin-binding protein CIB. *Brain Res.* 1265: 24-29.

CHROMOSOMAL LOCATION

Genetic locus: LMO3 (human) mapping to 12p12.3; Lmo3 (mouse) mapping to 6 G1.

SOURCE

LMO3 (1A8) is a mouse monoclonal antibody raised against amino acids 91-146 representing partial length LMO3 of human origin.

PRODUCT

Each vial contains 100 μ g IgG_{2b} kappa light chain in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

LMO3 (1A8) is recommended for detection of LMO3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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 LMO3 siRNA (h): sc-75429, LMO3 siRNA (m): sc-75430, LMO3 shRNA Plasmid (h): sc-75429-SH, LMO3 shRNA Plasmid (m): sc-75430-SH, LMO3 shRNA (h) Lentiviral Particles: sc-75429-V and LMO3 shRNA (m) Lentiviral Particles: sc-75430-V.

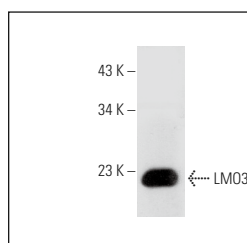
Molecular Weight of LMO3: 17 kDa.

Positive Controls: mouse heart extract: sc-2254.

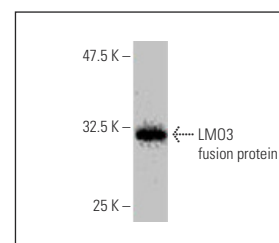
RECOMMENDED SUPPORT REAGENTS

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



LMO3 (1A8): sc-517019. Western blot analysis of LMO3 expression in mouse heart tissue extract.



LMO3 (1A8): sc-517019. Western blot analysis of human recombinant LMO3 fusion protein.

SELECT PRODUCT CITATIONS

- Chen, D., et al. 2019. MicroRNA-382 inhibits cancer cell growth and metastasis in NSCLC via targeting LMO3. *Exp. Ther. Med.* 17: 2417-2424.

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.