

# LMO6 (N-17): sc-82649

## 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 LIM domain only protein 6 (LMO6), also designated Prickle-like protein 3 (Prickle3), is a 615 amino acid protein that contains 3 LIM zinc-binding domains and one PET domain. LMO6 is widely expressed and belongs to the prickle/espinas/testin family, which also includes Prickle1 and Prickle2. Defects in Prickle1 are the cause of progressive myoclonic epilepsy type 1B (EPM1B), an autosomal recessive disorder characterized by myoclonus that progresses in severity over time, tonic-clonic seizures and ataxia.

## REFERENCES

1. Fisher, S.E., et al. 1997. Sequence-based exon prediction around the synaptophysin locus reveals a gene-rich area containing novel genes in human proximal Xp. *Genomics* 45: 340-347.
2. Putilina, T., et al. 1998. Analysis of a human cDNA containing a tissue-specific alternatively spliced LIM domain. *Biochem. Biophys. Res. Commun.* 252: 433-439.
3. Cenciarelli, C., et al. 1999. Identification of a family of human F-box proteins. *Curr. Biol.* 9: 1177-1179.
4. Katoh, M. and Katoh, M. 2003. Identification and characterization of human PRICKLE1 and PRICKLE2 genes as well as mouse Prickle1 and Prickle2 genes homologous to *Drosophila* tissue polarity gene prickle. *Int. J. Mol. Med.* 11: 249-256.
5. Shimojo, M. and Hersh, L.B. 2003. REST/NRSF-interacting LIM domain protein, a putative nuclear translocation receptor. *Mol. Cell. Biol.* 23: 9025-9031.
6. Bassuk, A.G., et al. 2008. A homozygous mutation in human PRICKLE1 causes an autosomal-recessive progressive myoclonus epilepsy-ataxia syndrome. *Am. J. Hum. Genet.* 83: 572-581.

## CHROMOSOMAL LOCATION

Genetic locus: PRICKLE3 (human) mapping to Xp11.23; Prickle3 (mouse) mapping to X A1.1.

## SOURCE

LMO6 (N-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of LMO6 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.

Blocking peptide available for competition studies, sc-82649 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-82649 X, 200 µg/0.1 ml.

## APPLICATIONS

LMO6 (N-17) is recommended for detection of LMO6 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); non cross-reactive with other LMO family members.

LMO6 (N-17) is also recommended for detection of LMO6 in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for LMO6 siRNA (h): sc-75431, LMO6 siRNA (m): sc-75432, LMO6 shRNA Plasmid (h): sc-75431-SH, LMO6 shRNA Plasmid (m): sc-75432-SH, LMO6 shRNA (h) Lentiviral Particles: sc-75431-V and LMO6 shRNA (m) Lentiviral Particles: sc-75432-V.

LMO6 (N-17) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

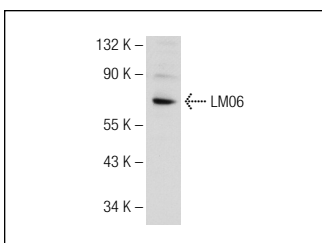
Molecular Weight of LMO6: 69 kDa.

Positive Controls: Jurkat nuclear extract: sc-2132.

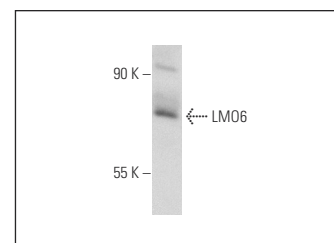
## RECOMMENDED SECONDARY REAGENTS

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™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 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™ Mounting Medium: sc-24941.

## DATA



LMO6 (N-17): sc-82649. Western blot analysis of LMO6 expression in Jurkat nuclear extract.



LMO6 (N-17): sc-82649. Western blot analysis of LMO6 expression in 293T 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.