

Mex3b (4C4): sc-293407

BACKGROUND

Mex-3 (muscle excess protein-3) is a translational regulator in *Caenorhabditis elegans* that participates in maintaining the germline totipotency and in specification of posterior blastomeres in early embryos. In humans, four evolutionarily conserved Mex-3 homologs exist, namely Mex3a, Mex3b, Mex3c and Mex3d. These proteins comprise a family of RNA binding phosphoproteins which each contain two tandemly repeated KH (nuclear ribonucleoprotein K homology) domains and one C-terminal RING finger motif. In addition, the Mex-3 homolog family of proteins shuttle between the nucleus and the cytoplasm through the CRM1-dependent export pathway and may play a role regulating post-transcriptional events.

REFERENCES

1. Simpson, J.C., et al. 2000. Systematic subcellular localization of novel proteins identified by large-scale cDNA sequencing. *EMBO Rep.* 1: 287-292.
2. Hartley, J.L., et al. 2000. DNA cloning using *in vitro* site-specific recombination. *Genome Res.* 10: 1788-1795.
3. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 611008. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
4. Stelzl, U., et al. 2005. A human protein-protein interaction network: a resource for annotating the proteome. *Cell* 122: 957-968.
5. Barrios-Rodiles, M., et al. 2005. High-throughput mapping of a dynamic signaling network in mammalian cells. *Science* 307: 1621-1625.
6. Buchet-Poyau, K., et al. 2007. Identification and characterization of human Mex-3 proteins, a novel family of evolutionarily conserved RNA-binding proteins differentially localized to processing bodies. *Nucleic Acids Res.* 35: 1289-1300.

CHROMOSOMAL LOCATION

Genetic locus: MEX3B (human) mapping to 15q25.2; Mex3b (mouse) mapping to 7 D3.

SOURCE

Mex3b (4C4) is a mouse monoclonal antibody raised against amino acids 60-159 of Mex3b of human origin.

PRODUCT

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

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 for detailed protocols and support products.

APPLICATIONS

Mex3b (4C4) is recommended for detection of Mex3b 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

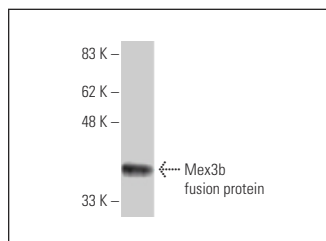
Suitable for use as control antibody for Mex3b siRNA (h): sc-90269, Mex3b siRNA (m): sc-149396, Mex3b shRNA Plasmid (h): sc-90269-SH, Mex3b shRNA Plasmid (m): sc-149396-SH, Mex3b shRNA (h) Lentiviral Particles: sc-90269-V and Mex3b shRNA (m) Lentiviral Particles: sc-149396-V.

Molecular Weight of Mex3b: 59 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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).

DATA



Mex3b (4C4): sc-293407. Western blot analysis of human recombinant Mex3b fusion protein.

SELECT PRODUCT CITATIONS

1. Huang, L., et al. 2018. The RNA-binding protein Mex3b mediates resistance to cancer immunotherapy by downregulating HLA-A expression. *Clin. Cancer Res.* 24: 3366-3376.

RESEARCH USE

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