Mex3b (D-12): sc-515833



The Power to Question

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

- 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.
- 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.
- 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 (D-12) is a mouse monoclonal antibody raised against amino acids 336-385 mapping within an internal region of Mex3b of human origin.

PRODUCT

Each vial contains 200 μg 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-515833 X, 200 μg /0.1 ml.

Mex3b (D-12) is available conjugated to agarose (sc-515833 AC), 500 μg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-515833 HRP), 200 μg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515833 PE), fluorescein (sc-515833 FITC), Alexa Fluor 488 (sc-515833 AF488), Alexa Fluor 546 (sc-515833 AF546), Alexa Fluor 594 (sc-515833 AF594) or Alexa Fluor 647 (sc-515833 AF647), 200 μg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor 680 (sc-515833 AF680) or Alexa Fluor 790 (sc-515833 AF790), 200 μg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

Mex3b (D-12) is recommended for detection of Mex3b of mouse, rat and 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 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.

Mex3b (D-12) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

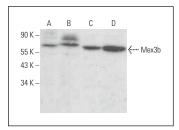
Molecular Weight of Mex3b: 59 kDa.

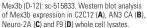
Positive Controls: K-562 whole cell lysate: sc-2203, Y79 cell lysate: sc-2240 or human testis extract: sc-363781.

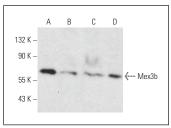
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG κ BP-HRP: sc-516102 or m-lgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM 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-lgG κ BP-FITC: sc-516140 or m-lgG 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







Mex3b (D-12): sc-515833. Western blot analysis of Mex3b expression in K-562 (**A**), Y79 (**B**) and IMR-32 (**C**) whole cell lysates and human testis tissue extract (**D**).

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.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA