# SANTA CRUZ BIOTECHNOLOGY, INC.

# Mex3b (G-14): sc-165006



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.
- 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.
- 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 (G-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Mex3b of human origin.

## PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-165006 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### STORAGE

Store at 4° C, \*\*D0 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.

## APPLICATIONS

Mex3b (G-14) 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), 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 Mex3a, Mex3c or Mex3d.

Mex3b (G-14) is also recommended for detection of Mex3b in additional species, including equine, canine and bovine.

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 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) Immunofluo-rescence: 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.

#### PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

#### MONOS Satisfation Guaranteed

Try **Mex3b (4C4): sc-293407**, our highly recommended monoclonal alternative to Mex3b (G-14).