SANTA CRUZ BIOTECHNOLOGY, INC.

Mex3c (G-18): sc-85058

SANTA CRUZ BIOTECHNOLOGY

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 specifies the 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. Mex3c, also known as RING finger and KH domain-containing protein 2, is a 659 amino acid RNA-binding protein that is expressed at highest levels in fetal brain and testis. Genetic variations in the gene encoding Mex3c may be associated with an increased risk for essential hypertension type 8.

CHROMOSOMAL LOCATION

Genetic locus: MEX3C (human) mapping to 18q21.2; Mex3c (mouse) mapping to 18 E2.

SOURCE

Mex3c (G-18) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of Mex3c of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-85058 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Mex3c (G-18) is recommended for detection of Mex3c 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 Mex67.

Mex3c (G-18) is also recommended for detection of Mex3c in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Mex3c siRNA (h): sc-75778, Mex3c siRNA (m): sc-149397, Mex3c shRNA Plasmid (h): sc-75778-SH, Mex3c shRNA Plasmid (m): sc-149397-SH, Mex3c shRNA (h) Lentiviral Particles: sc-75778-V and Mex3c shRNA (m) Lentiviral Particles: sc-149397-V.

Molecular Weight (predicted) of Mex3c: 69 kDa.

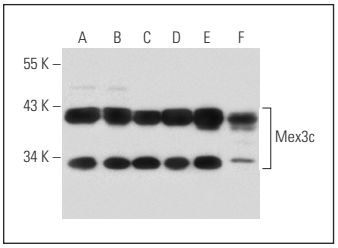
Molecular Weight (observed) of Mex3c: 41 kDa.

Positive Controls: LNCaP cell lysate: sc-2231, SK-BR-3 cell lysate: sc-2218 or Caki-1 cell lysate: sc-2224.

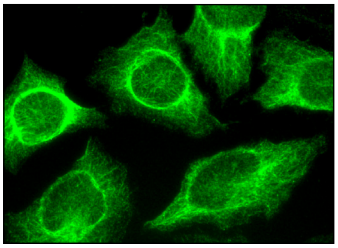
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Mex3c (G-18): sc-85058. Western blot analysis of Mex3c expression in SK-BR-3 (**A**), Caki-1 (**B**), MCF7 (**C**), HeLa (**D**), LNCaP (**E**) and Caco-2 (**F**) whole cell lysates.



Mex3c (G-18): sc-85058. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic and nuclear localization.

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.

PROTOCOLS

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