# DEME-6 (S-14): sc-242571



The Power to Question

#### **BACKGROUND**

The tetratricopeptide repeat (TPR) motif is a degenerate 34 amino acid sequence found in many proteins and acts to mediate protein-protein interactions in various pathways. At the sequence level, there can be up to 16 tandem TPR repeats, each of which has a helix-turn-helix shape that stacks on other TPR repeats to achieve ligand binding specificity. DEME-6 (Differentially expressed in MCF7 with estradiol protein 6), also known as Tetratricopeptide repeat protein 39A, is a 613 amino acid protein that contains three TPR repeats and exists as four isoforms. The gene encoding DEME-6 maps to human chromosome 1, the largest human chromosome which spans about 260 million base pairs and makes up 8% of the human genome. Other notable genes located on chromosome 1 include LMNA, which is associated with the rare aging disease Hutchinson-Gilford progeria, and the MUTYH gene, which is partially responsible for familial adenomatous polyposis. Stickler syndrome, Parkinsons, Gaucher disease and Usher syndrome.

## **REFERENCES**

- 1. Watson, M.L., et al. 1990. Genomic organization of the selectin family of leukocyte adhesion molecules on human and mouse chromosome 1. J. Exp. Med. 172: 263-272.
- Blackwood, D.H., et al. 2001. Schizophrenia and affective disorders cosegregation with a translocation at chromosome 1q42 that directly disrupts brain-expressed genes: clinical and P300 findings in a family. Am. J. Hum. Genet. 69: 428-433
- Weise, A., et al. 2005. New insights into the evolution of chromosome 1. Cytogenet. Genome Res. 108: 217-222.
- 4. Lans, H., et al. 2006. Cell biology: aging nucleus gets out of shape. Nature 440: 32-34.
- Gregory, S.G., et al. 2006. The DNA sequence and biological annotation of human chromosome 1. Nature 441: 315-321.
- Hennah, W., et al. 2006. Genes and schizophrenia: beyond schizophrenia: the role of DISC-1 in major mental illness. Schizophr. Bull. 32: 409-416.
- Marzin, Y., et al. 2006. Chromosome 1 abnormalities in multiple myeloma. Anticancer Res. 26: 953-959.
- McClintock, D., et al. 2006. Hutchinson-Gilford progeria mutant Lamin A primarily targets human vascular cells as detected by an anti-Lamin A G608G antibody. Proc. Natl. Acad. Sci. USA 103: 2154-2159.

# CHROMOSOMAL LOCATION

Genetic locus: TTC39A (human) mapping to 1p32.3; Ttc39a (mouse) mapping to 4 C7.

## SOURCE

DEME-6 (S-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of DEME-6 of human origin.

## **STORAGE**

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### **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-242571 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **APPLICATIONS**

DEME-6 (S-14) is recommended for detection of DEME-6 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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).

DEME-6 (S-14) is also recommended for detection of DEME-6 in additional species, including bovine and porcine.

Suitable for use as control antibody for DEME-6 siRNA (h): sc-88791, DEME-6 siRNA (m): sc-142993, DEME-6 shRNA Plasmid (h): sc-88791-SH, DEME-6 shRNA Plasmid (m): sc-142993-SH, DEME-6 shRNA (h) Lentiviral Particles: sc-88791-V and DEME-6 shRNA (m) Lentiviral Particles: sc-142993-V.

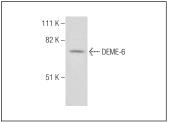
Molecular Weight of DEME-6 isoforms 1/2/3/4: 70/25/46/67 kDa.

Positive Controls: U-87 MG cell lysate: sc-2411.

## **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



DEME-6 (S-14): sc-242571. Western blot analysis of DEME-6 expression in MDA-MB-231 whole cell lysate

#### **RESEARCH USE**

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