SANTA CRUZ BIOTECHNOLOGY, INC.

EMID1 (G-5): sc-515523

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

EMID1 (EMI domain containing 1) is a 441 amino acid secreted protein that contains one collagen-like domain and one EMI domain. The EMI domain contains seven conserved cysteines that may mediate dimerization. The Emid1 mouse gene contains 15 exons and spans 54 kb. Existing as three alternatively spliced isoforms, the EMID1 gene is conserved in chimpanzee, canine, bovine, mouse, rat, chicken and zebrafish, and maps to human chromosome 22q12.2. Chromosome 22 contains over 500 genes and about 49 million bases. Being the second smallest human chromosome 22, contains a surprising variety of interesting genes. Phelan-McDermid syndrome, neurofibromatosis type 2 and autism are associated with chromosome 22. A schizophrenia susceptibility locus has been identified on chromosome 22 and studies show that 22q12.2 deletion symptoms include a high incidence of schizophrenia.

REFERENCES

1. Gilbert, F. 1998. Disease genes and chromosomes: disease maps of the human genome. Chromosome 22. Genet. Test. 2: 89-97.
2. Schwab, S.G. and Wildenauer, D.B. 1999. Chromosome 22 workshop report. Am. J. Med. Genet. 88: 276-278.
3. Dunham, I., et al. 1999. The DNA sequence of human chromosome 22. Nature 402: 489-495.
4. Leimeister, C., et al. 2002. Developmental expression and biochemical characterization of Emu family members. Dev. Biol. 249: 204-218.
5. Online Mendelian Inheritance in Man, OMIM™. 2004. Johns Hopkins University, Baltimore, MD. MIM Number: 608926. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
6. Arinami, T. 2006. Analyses of the associations between the genes of 22q11 deletion syndrome and schizophrenia. J. Hum. Genet. 51: 1037-1045.
7. Hay, B.N. 2007. Deletion 22q11: spectrum of associated disorders. Semin. Pediatr. Neurol. 14: 136-139.

CHROMOSOMAL LOCATION

Genetic locus: EMID1 (human) mapping to 22q12.2.

SOURCE

EMID1 (G-5) is a mouse monoclonal antibody raised against amino acids 156-222 mapping within an internal region of EMID1 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.

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

EMID1 (G-5) is recommended for detection of EMID1 of human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for EMID1 siRNA (h): sc-77270, EMID1 shRNA Plasmid (h): sc-77270-SH and EMID1 shRNA (h) Lentiviral Particles: sc-77270-V.

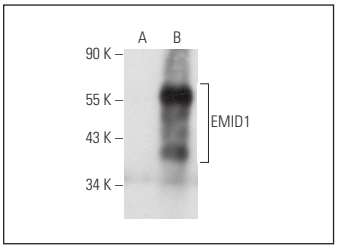
Molecular Weight of EMID1: 45 kDa.

Positive Controls: EMID1 (h): 293T Lysate: sc-115983 or HEL 92.1.7 cell lysate: sc-2270.

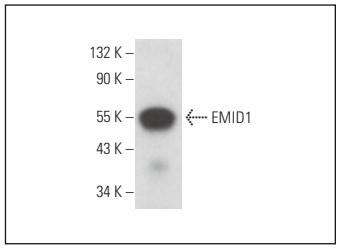
RECOMMENDED SUPPORT REAGENTS

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). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ 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



EMID1 (G-5): sc-515523. Western blot analysis of expression in non-transfected: sc-117752 (**A**) and human EMID1 transfected: sc-115983 (**B**) 293T whole cell lysates.



EMID1 (G-5): sc-515523. Western blot analysis of EMID1 expression in HEL 92.1.7 whole cell lysate.

RESEARCH USE

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