

EMID2 (h): 293T Lysate: sc-112481

BACKGROUND

EMID2 (EMI domain-containing protein 2), also known as COL26A1 (collagen α -1(XXVI) chain) or EMU2, is a 441 amino acid secreted protein that is hydroxylated on proline residues. EMID2 contains an N-terminal signal peptide, followed by an emilin (EMI) domain, two collagen stretches and a novel C-terminal domain. The EMI domain contains seven conserved cysteines that may mediate dimerization. Existing as two alternatively spliced isoforms, the EMID2 gene is conserved in chimpanzee, canine, bovine, mouse and chicken, and maps to human chromosome 7q22.1. The EMID2 gene contains 13 exons and spans 196 kb. Chromosome 7 is approximately 158 million bases long, encodes over 1,000 genes and makes up about 5% of the human genome. Chromosome 7 has been linked to osteogenesis imperfecta, Pendred syndrome, lissencephaly, citrullinemia and Shwachman-Diamond syndrome. The deletion of a portion of the q arm of chromosome 7 is associated with Williams-Beuren syndrome, a condition characterized by mild mental retardation, an unusual comfort and friendliness with strangers, and an elfin appearance.

REFERENCES

1. Liang, H., et al. 1998. Molecular anatomy of chromosome 7q deletions in myeloid neoplasms: evidence for multiple critical loci. *Proc. Natl. Acad. Sci. USA* 95: 3781-3785.
2. Leimeister, C., et al. 2002. Developmental expression and biochemical characterization of Emu family members. *Dev. Biol.* 249: 204-218.
3. Sato, K., et al. 2002. Type XXVI collagen, a new member of the collagen family, is specifically expressed in the testis and ovary. *J. Biol. Chem.* 277: 37678-37684.
4. Hillier, L.W., et al. 2003. The DNA sequence of human chromosome 7. *Nature* 424: 157-164.
5. Online Mendelian Inheritance in Man, OMIM™. 2004. Johns Hopkins University, Baltimore, MD. MIM Number: 608927. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
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CHROMOSOMAL LOCATION

Genetic locus: EMID2 (human) mapping to 7q22.1.

PRODUCT

EMID2 (h): 293T Lysate represents a lysate of human EMID2 transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

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

APPLICATIONS

EMID2 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive EMID2 antibodies. Recommended use: 10-20 μ l per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

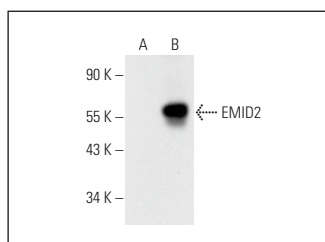
EMID2 (B-7): sc-514522 is recommended as a positive control antibody for Western Blot analysis of enhanced human EMID2 expression in EMID2 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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.

DATA



EMID2 (B-7): sc-514522. Western blot analysis of EMID2 expression in non-transfected: sc-117752 (A) and human EMID2 transfected: sc-112481 (B) 293T whole cell lysates.

PROTOCOLS

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