

EMID2 (B-7): sc-514522

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.

CHROMOSOMAL LOCATION

Genetic locus: COL26A1 (human) mapping to 7q22.1; Col26a1 (mouse) mapping to 5 G2.

SOURCE

EMID2 (B-7) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 377-402 near the C-terminus of EMID2 of human origin.

PRODUCT

Each vial contains 200 μ g IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

EMID2 (B-7) is available conjugated to agarose (sc-514522 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514522 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514522 PE), fluorescein (sc-514522 FITC), Alexa Fluor® 488 (sc-514522 AF488), Alexa Fluor® 546 (sc-514522 AF546), Alexa Fluor® 594 (sc-514522 AF594) or Alexa Fluor® 647 (sc-514522 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514522 AF680) or Alexa Fluor® 790 (sc-514522 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-514522 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

RESEARCH USE

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

APPLICATIONS

EMID2 (B-7) is recommended for detection of EMID2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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).

Suitable for use as control antibody for EMID2 siRNA (h): sc-89406, EMID2 siRNA (m): sc-144641, EMID2 shRNA Plasmid (h): sc-89406-SH, EMID2 shRNA Plasmid (m): sc-144641-SH, EMID2 shRNA (h) Lentiviral Particles: sc-89406-V and EMID2 shRNA (m) Lentiviral Particles: sc-144641-V.

Molecular Weight (predicted) of EMID2: 45 kDa.

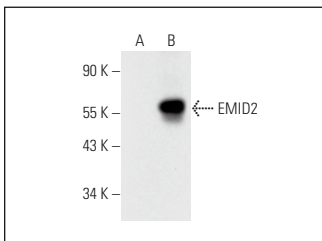
Molecular Weight (observed) of EMID2: 55 kDa.

Positive Controls: EMID2 (h): 293T Lysate: sc-112481.

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ 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



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.

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.

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