

EMILIN-5 (F-11): sc-390777

BACKGROUND

EMILINs (elastin microfibril interface located proteins) are extracellular matrix glycoproteins that localize to sites with proximity to elastin and microfibrils. They consist of an N-terminal cysteine rich EMI domain and a conserved C-terminal γ C1q-like domain. EMILIN-1 is abundant in elastin-rich tissues such as blood vessels, skin, heart and lung. It influences placenta formation and initial organogenesis with a later role in interstitial connective tissue. EMILIN-2 is larger than EMILIN-1 and contains a unique proline-rich domain. It is likely involved in the process of elastogenesis. Multimerin-2 (also known as EMILIN-3 or EndoGlyx-1) is expressed during embryonic development. Multimerin-1 (also known as EMILIN-4) is expressed in platelets and the endothelium of blood vessels and may act as a carrier protein for platelet factor V. EMILIN-5 is encoded by the EMILIN3 gene and is sometimes referred to as EMILIN-3. It contains the N-terminal cysteine rich EMI domain but lacks the C-terminal γ C1q-like domain. EMILIN-5 is expressed in human mesenchymal stem cells and plays an important role in skeletal development.

REFERENCES

1. Doliana, R., et al. 1999. EMILIN, a component of the elastic fiber and a new member of the C1q/tumor necrosis factor superfamily of proteins. *J. Biol. Chem.* 274: 16773-16781.
2. Mongiat, M., et al. 2000. Self-assembly and supramolecular organization of EMILIN. *J. Biol. Chem.* 275: 25471-25480.
3. Doliana, R., et al. 2001. Isolation and characterization of EMILIN-2, a new component of the growing EMILINs family and a member of the EMI domain-containing superfamily. *J. Biol. Chem.* 276: 12003-12011.
4. Braghetta, P., et al. 2002. Expression of the EMILIN-1 gene during mouse development. *Matrix Biol.* 21: 603-609.

CHROMOSOMAL LOCATION

Genetic locus: EMILIN3 (human) mapping to 20q12; Emilin3 (mouse) mapping to 2 H2.

SOURCE

EMILIN-5 (F-11) is a mouse monoclonal antibody raised against amino acids 122-421 mapping within an internal region of EMILIN-5 of human origin.

PRODUCT

Each vial contains 200 μ g IgG κ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

EMILIN-5 (F-11) is available conjugated to agarose (sc-390777 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390777 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390777 PE), fluorescein (sc-390777 FITC), Alexa Fluor[®] 488 (sc-390777 AF488), Alexa Fluor[®] 546 (sc-390777 AF546), Alexa Fluor[®] 594 (sc-390777 AF594) or Alexa Fluor[®] 647 (sc-390777 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-390777 AF680) or Alexa Fluor[®] 790 (sc-390777 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

EMILIN-5 (F-11) is recommended for detection of EMILIN-5 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 EMILIN-5 siRNA (h): sc-72272, EMILIN-5 siRNA (m): sc-72273, EMILIN-5 shRNA Plasmid (h): sc-72272-SH, EMILIN-5 shRNA Plasmid (m): sc-72273-SH, EMILIN-5 shRNA (h) Lentiviral Particles: sc-72272-V and EMILIN-5 shRNA (m) Lentiviral Particles: sc-72273-V.

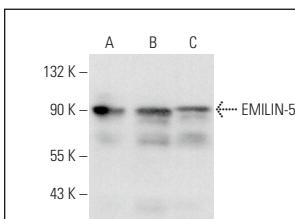
Molecular Weight of EMILIN-5: 105 kDa.

Positive Controls: C2C12 whole cell lysate: sc-364188, NTERA-2 cl.D1 whole cell lysate: sc-364181 or RD whole cell lysate: sc-364791.

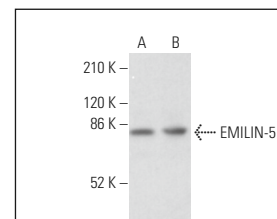
RECOMMENDED SUPPORT REAGENTS

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



EMILIN-5 (F-11): sc-390777. Western blot analysis of EMILIN-5 expression in RD (A), NTERA-2 cl.D1 (B) and 3611-RF (C) whole cell lysates.



EMILIN-5 (F-11): sc-390777. Western blot analysis of EMILIN-5 expression in C2C12 (A) and Sol8 (B) 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.

RESEARCH USE

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

PROTOCOLS

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