

# 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  $\gamma$ 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  $\gamma$ 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  $\mu$ g IgG<sub>1</sub> 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  $\mu$ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390777 HRP), 200  $\mu$ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390777 PE), fluorescein (sc-390777 FITC), Alexa Fluor<sup>®</sup> 488 (sc-390777 AF488), Alexa Fluor<sup>®</sup> 546 (sc-390777 AF546), Alexa Fluor<sup>®</sup> 594 (sc-390777 AF594) or Alexa Fluor<sup>®</sup> 647 (sc-390777 AF647), 200  $\mu$ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor<sup>®</sup> 680 (sc-390777 AF680) or Alexa Fluor<sup>®</sup> 790 (sc-390777 AF790), 200  $\mu$ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Alexa Fluor<sup>®</sup> is a trademark of Molecular Probes, Inc., Oregon, USA

## 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  $\mu$ 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).

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.

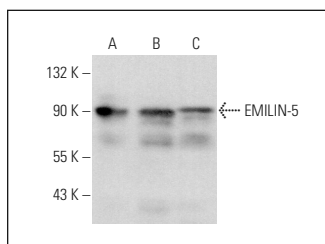
Molecular Weight of EMILIN-5: 105 kDa.

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

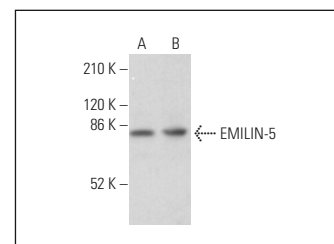
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> 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 $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz<sup>®</sup> Mounting Medium: sc-24941 or UltraCruz<sup>®</sup> 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](http://www.scbt.com) for detailed protocols and support products.