# EMILIN-5 (K-15): sc-51359



The Power to Question

## **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 gC1q-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 gC1q-like domain. EMILIN-5 is expressed in human mesenchymal stem cells and plays an important role in skeletal development.

## **REFERENCES**

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## **CHROMOSOMAL LOCATION**

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

## **SOURCE**

EMILIN-5 (K-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of EMILIN-5 of human origin.

#### **PRODUCT**

Each vial contains 200  $\mu g$  IgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-51359 P, ( $100 \mu g$  peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **APPLICATIONS**

EMILIN-5 (K-15) is recommended for detection of precursor and mature EMILIN-5 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

EMILIN-5 (K-15) is also recommended for detection of precursor and mature EMILIN-5 in additional species, including equine, canine, porcine and avian.

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.

## **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## **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 or our catalog for detailed protocols and support products.



Try **EMILIN-5 (F-11):** sc-390777, our highly recommended monoclonal alternative to EMILIN-5 (K-15).