

EMILIN-2 (K-20): sc-51355

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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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 EMILIN1 gene during mouse development. *Matrix Biol.* 21: 603-609.
5. Spessotto, P., et al. 2003. β 1 Integrin-dependent cell adhesion to EMILIN-1 is mediated by the gC1q domain. *J. Biol. Chem.* 278: 6160-6167.
6. Doi, M., et al. 2004. Molecular cloning and characterization of a novel gene, EMILIN5, and its possible involvement in skeletal development. *Biochem. Biophys. Res. Commun.* 313: 888-893.
7. Kishore, U., et al. 2004. C1q and tumor necrosis factor superfamily: modularity and versatility. *Trends Immunol.* 25: 551-561.
8. Verdone, G., et al. 2004. Sequence-specific backbone NMR assignments for the C-terminal globular domain of EMILIN-1. *J. Biomol. NMR* 29: 91-92.

CHROMOSOMAL LOCATION

Genetic locus: EMILIN2 (human) mapping to 18p11.32; Emilin2 (mouse) mapping to 17 E1.3.

SOURCE

EMILIN-2 (K-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of EMILIN-2 of human origin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PRODUCT

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

Blocking peptide available for competition studies, sc-51355 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

EMILIN-2 (K-20) is recommended for detection of EMILIN-2 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-2 (K-20) is also recommended for detection of EMILIN-2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for EMILIN-2 siRNA (h): sc-72374, EMILIN-2 siRNA (m): sc-72375, EMILIN-2 shRNA Plasmid (h): sc-72374-SH, EMILIN-2 shRNA Plasmid (m): sc-72375-SH, EMILIN-2 shRNA (h) Lentiviral Particles: sc-72374-V and EMILIN-2 shRNA (m) Lentiviral Particles: sc-72375-V.

Molecular Weight of EMILIN-2: 112 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.

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.