

Multimerin-2 (N-20): sc-54121

BACKGROUND

Multimerin-2 belongs to a class of proteins called EMILINs (elastin microfibril interface located proteins) due to its EMI domain. EMILINs are extracellular matrix glycoproteins that localize to sites with proximity to elastin and microfibrils. EMILINs are abundant in elastin-rich tissues such as blood vessels, skin, heart and lung. Multimerin-2 (also known as Emilin-3 or EndoGlyx-1) is expressed during embryonic development. During skeletal development, Multimerin-2 is present at sites of cartilage and bone formation. In later stages of development, Multimerin-2 is expressed in the nervous plexus of the digestive tract and in the main bronchial branches. A developmental protein, Multimerin-2 is more readily detected in immature osteoblasts than in mature osteoblasts.

REFERENCES

- Hayward, C.P. and Kelton, J.G. 1995. Multimerin. *Curr. Opin. Hematol.* 2: 339-344.
- Hayward, C.P. 1997. Multimerin: a bench-to-bedside chronology of a unique platelet and endothelial cell protein—from discovery to function to abnormalities in disease. *Clin. Invest. Med.* 20: 176-187.
- Doliana, R., Mongiat, M., Bucciotti, F., Giacomello, E., Deutzmann, R., Volpin, D., Bressan, G.M. and Colombatti, A. 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.
- Doliana, R., Bot, S., Bonaldo, P. and Colombatti, A. 2000. EMI, a novel cysteine-rich domain of EMILINs and other extracellular proteins, interacts with the gC1q domains and participates in multimerization. *FEBS Lett.* 484: 164-168.
- Doliana, R., Canton, A., Bucciotti, F., Mongiat, M., Bonaldo, P. and Colombatti, A. 2000. Structure, chromosomal localization and promoter analysis of the human elastin microfibril interfase located protein (EMILIN) gene. *J. Biol. Chem.* 275: 785-792.
- Colombatti, A., Doliana, R., Bot, S., Canton, A., Mongiat, M., Munguerra, G., Paron-Cilli, S. and Spessotto, P. 2000. The EMILIN protein family. *Matrix Biol.* 19: 289-301.
- Christian, S., Ahorn, H., Novatchkova, M., Garin-Chesa, P., Park, J.E., Weber, G., Eisenhaber, F., Rettig, W.J. and Lenter, M.C. 2001. Molecular cloning and characterization of EndoGlyx-1, an EMILIN-like multisubunit glycoprotein of vascular endothelium. *J. Biol. Chem.* 276: 48588-48595.
- Leimeister, C., Steidl, C., Schumacher, N., Erhard, S. and Gessler, M. 2002. Developmental expression and biochemical characterization of Emu family members. *Dev. Biol.* 249: 204-218.
- Doi, M., Nagano, A. and Nakamura, Y. 2004. Molecular cloning and characterization of a novel gene, EMILIN-5, and its possible involvement in skeletal development. *Biochem. Biophys. Res. Commun.* 313: 888-893.

CHROMOSOMAL LOCATION

Genetic locus: MMRN2 (human) mapping to 10q23.2.

SOURCE

Multimerin-2 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Multimerin-2 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-54121 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Multimerin-2 (N-20) is recommended for detection of Multimerin-2 precursor and mature EMILIN-3 of 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).

Molecular Weight of Multimerin-2: 104 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.


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Try **Multimerin-2 (6D365): sc-71624**, our highly recommended monoclonal alternative to Multimerin-2 (N-20).