

ECM1 (N-17): sc-65086

BACKGROUND

ECM1 (extracellular matrix protein 1), also known as secretory component p85, is a secreted glycoprotein that is essential for the proper structure and function of the skin. It is widely expressed and localizes to the extracellular matrix. ECM1 binds to a variety of extracellular matrix components, including Perlecan, fibulin and matrix metalloproteinase-9 (MMP-9), and participates in the structural organization of the dermis. In addition, ECM1 enhances the association of Collagen Type IV with Laminin 332 suggesting that it is a key player in interstitial dermis and the dermal-epidermal junction. Mutations in the gene encoding ECM1 result in the autosomal recessive disorder lipoid proteinosis (LiP). LiP is characterized by hyalinization of the dermis and reduplication of the basement membrane of the skin. LiP patients exhibit thickening of the skin and mucosae. Four splice variants (known as ECM1 α -ECM1 δ) exist for ECM1.

REFERENCES

- Horev, L., et al. 2005. A novel splice-site mutation in ECM1 gene in a consanguineous family with lipoid proteinosis. *Exp. Dermatol.* 14: 891-897.
- Lupo, I., et al. 2005. A novel mutation of the extracellular matrix protein 1 gene (ECM1) in a patient with lipoid proteinosis (Urbach-Wiethe disease) from Sicily. *Br. J. Dermatol.* 153: 1019-1022.
- Fujimoto, N., et al. 2005. Extracellular matrix protein 1 interacts with the domain III of Fibulin-1C and -1D variants through its central tandem repeat 2. *Biochem. Biophys. Res. Commun.* 333: 1327-1333.
- Kebebew, E., et al. 2005. ECM1 and TMPRSS4 are diagnostic markers of malignant thyroid neoplasms and improve the accuracy of fine needle aspiration biopsy. *Ann. Surg.* 242: 353-361.
- Fujimoto, N., et al. 2006. Extracellular matrix protein 1 inhibits the activity of matrix metalloproteinase-9 through high-affinity protein/protein interactions. *Exp. Dermatol.* 15: 300-307.
- Sander, C.S., et al. 2006. Expression of extracellular matrix protein 1 (ECM1) in human skin is decreased by age and increased upon ultraviolet exposure. *Br. J. Dermatol.* 154: 218-224.
- Chan, I., et al. 2007. The molecular basis of lipoid proteinosis: mutations in extracellular matrix protein 1. *Exp. Dermatol.* 16: 881-890.
- Sercu, S., et al. 2007. Functional redundancy of extracellular matrix protein 1 in epidermal differentiation. *Br. J. Dermatol.* 157: 771-775.

CHROMOSOMAL LOCATION

Genetic locus: ECM1 (human) mapping to 1q21.3.

SOURCE

ECM1 (N-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of ECM1 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-65086 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

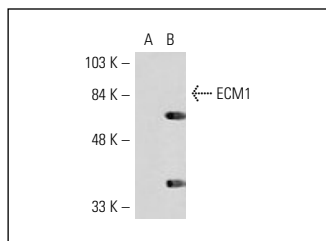
ECM1 (N-17) is recommended for detection of ECM1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for ECM1 siRNA (h): sc-62255, ECM1 shRNA Plasmid (h): sc-62255-SH and ECM1 shRNA (h) Lentiviral Particles: sc-62255-V.

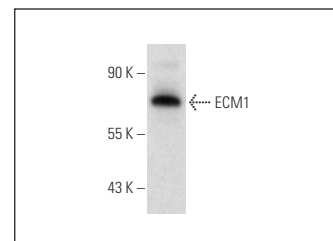
Molecular Weight of ECM1: 85 kDa.

Positive Controls: A-375 cell lysate: sc-3811, CCD-1064Sk cell lysate: sc-2263 or Hs 294T whole cell lysate.

DATA



ECM1 (N-17): sc-65086. Western blot analysis of ECM1 expression in CCD-1064Sk (A) and Hs 294T (B) whole cell lysates.



ECM1 (N-17): sc-65086. Western blot analysis of ECM1 expression in A-375 whole cell lysate.

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.

MONOS
Satisfaction
Guaranteed

Try **ECM1 (C-12): sc-365946** or **ECM1 (F-1): sc-365335**, our highly recommended monoclonal alternatives to ECM1 (N-17).