SANTA CRUZ BIOTECHNOLOGY, INC.

ECM2 (I-14): sc-137440



The Power to Question

BACKGROUND

ECM2 (extracellular matrix protein 2), also known as matrix glycoprotein SC1/ ECM2, is a 699 amino acid secreted protein belonging to the small leucinerich proteoglycan (SLRP) family and SLRP class I subfamily. ECM2 is expressed abundantly in adipose tissue, as well as female-specific organs including mammary gland, ovary, and uterus. Containing 13 LRR (leucine-rich) repeats, one LRRNT domain, and one VWFC domain, ECM2 shares a wide range of similarities to known extracellular matrix proteins, including proteoglycan, keratocan, and decorin. ECM2 promotes cell adhesion and matrix assembly, and may function in cell-cell or cell-ECM recognition processes. Existing as two alternatively spliced isoforms, the gene encoding ECM2 maps to human chromosome 9q22.31. Chromosome 9 consists of about 145 million bases and 4% of the human genome and encodes nearly 900 genes.

REFERENCES

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- Tondreau, T., et al. 2008. Gene expression pattern of functional neuronal cells derived from human bone marrow mesenchymal stromal cells. BMC Genomics 9: 166.
- Schaefer, L., et al. 2008. Biological functions of the small leucine-rich proteoglycans: from genetics to signal transduction. J. Biol. Chem. 283: 21305-21309.

CHROMOSOMAL LOCATION

Genetic locus: ECM2 (human) mapping to 9q22.31; Ecm2 (mouse) mapping to 13 A5.

SOURCE

ECM2 (I-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal extracellular domain of ECM2 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 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-137440 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ECM2 (I-14) is recommended for detection of ECM2 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); non cross-reactive with ECM1 or ECM29.

Suitable for use as control antibody for ECM2 siRNA (h): sc-92906, ECM2 siRNA (m): sc-143287, ECM2 shRNA Plasmid (h): sc-92906-SH, ECM2 shRNA Plasmid (m): sc-143287-SH, ECM2 shRNA (h) Lentiviral Particles: sc-92906-V and ECM2 shRNA (m) Lentiviral Particles: sc-143287-V.

Molecular Weight of ECM2 isoforms 1/2: 80/73 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) Immunofluo-rescence: 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.