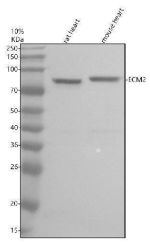
ECM2 Antibody / Extracellular matrix protein 2 Antibody (FY13616)

Catalog No.	Formulation	Size
FY13616	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Species Reactivity	Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	O94769
Applications	Western blot: 0.5-1ug/ml ELISA: 0.1-0.5 ug/ml
Limitations	Intended solely for research purposes, this ECM2 Antibody / Extracellular matrix protein 2 Antibody is not for clinical use.



ECM2 Antibody by WB in rat and mouse heart. Western blot analysis using Extracellular matrix protein 2 Antibody detects an immunoreactive band consistent with the expected molecular weight of approximately 80 kDa. Lane assignments: rat heart (lane 1), mouse heart (lane 2). Each lane contained 30 ug total protein under reducing conditions, resolved by 10% SDS-PAGE and transferred to nitrocellulose. Membranes were blocked with 5% nonfat milk and incubated with primary antibody at 0.5 ug/mL overnight at 4oC. An HRP-conjugated secondary antibody and chemiluminescent substrate were used for detection.

Description

ECM2 Antibody / Extracellular matrix protein 2 Antibody recognizes extracellular matrix protein 2, a secreted glycoprotein associated with the extracellular matrix of connective tissues. The ECM2 gene encodes a noncollagenous matrix constituent whose biological functions remain less thoroughly characterized than those of collagens, fibronectin, or laminins. Extracellular matrices are not static scaffolds: their molecular composition changes during development, tissue maintenance, and repair, and these changes influence how cells attach, move, and respond to mechanical forces. ECM2 belongs to this complex extracellular environment, where the identity and arrangement of individual components can substantially affect tissue properties.

The ECM2 protein contains a region related to von Willebrand factor type A domains, a structural module found in many proteins involved in extracellular interactions. Such domains often mediate contacts between proteins or between proteins and other matrix constituents, although the binding partners and affinities of ECM2 itself have not been comprehensively established. This distinction matters because the presence of a recognizable domain does not by itself demonstrate a particular adhesion mechanism. The protein's extracellular localization and domain architecture instead provide a starting point for investigating its molecular associations.

The ECM2 Antibody recognizes a noncollagenous component of this matrix, rather than the abundant fibrillar collagens that provide much of its tensile strength. Matrix composition influences cell behavior partly by controlling the presentation of biochemical cues and partly by changing the physical environment. Fibroblasts and other matrix-producing cells continually adjust the extracellular proteome in response to developmental programs, injury, and inflammatory signals. ECM2 expression has appeared in studies of connective-tissue and stromal gene programs, but its contribution to these processes cannot be inferred solely from changes in transcript abundance. Determining whether ECM2 modifies matrix assembly, cell-matrix interactions, or the availability of signaling molecules requires functional characterization.

A central unanswered question is whether ECM2 acts primarily as a structural participant in matrix networks or has more selective regulatory interactions. Resolving that question would help distinguish the functions of individual noncollagenous glycoproteins within the extracellular matrix, rather than treating matrix remodeling as a uniform increase or decrease in total matrix material.

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Application Notes

The optimal working dilution of the ECM2 Antibody / Extracellular matrix protein 2 Antibody should be determined empirically by the investigator.

Immunogen

The ECM2 Antibody was generated using e. coli-derived human ECM2 recombinant protein (amino acids I13-E676).

Storage

Following reconstitution, the ECM2 Antibody can be kept at 4oC for one month. Aliquot for extended storage at -20oC for up to six months, avoiding repeated freezing and thawing.

Alternate Names

ECM2 antibody, Extracellular matrix protein 2 antibody, Matrix glycoprotein SC1/ECM2 antibody, ECM2 rabbit polyclonal antibody

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