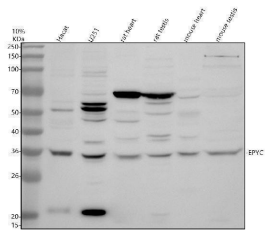
EPYC Antibody / Epiphycan Antibody (FY13657)

Catalog No.	Formulation	Size
FY13657	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Species Reactivity	Human, 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	Q99645
Applications	Western blot: 0.5-1ug/ml ELISA: 0.1-0.5 ug/ml
Limitations	The EPYC Antibody / Epiphycan Antibody is available for research use only.



EPYC Antibody by WB in human and rodent lysates. Western blot analysis using EPYC Antibody with 30 ug of reduced protein per lane on a 10% SDS-PAGE gel. Lanes 1-6 contain HaCaT cells, U251 cells, rat heart, rat testis, mouse heart and mouse testis lysates, respectively. A band near 36-37 kDa is visible across the samples, consistent with the expected molecular weight of epiphycan. Additional bands are visible in some lanes, particularly U251 and rodent tissues, but their identities are not established. Proteins were transferred to nitrocellulose, probed with 0.5 ug/ml primary antibody and detected using HRP and chemiluminescence.

Description

EPYC Antibody / Epiphycan Antibody recognizes epiphycan, an extracellular matrix proteoglycan encoded by EPYC and classified among the small leucine-rich proteoglycans. Epiphycan, historically termed dermatan sulfate proteoglycan 3, contains a leucine-rich repeat core protein that can carry glycosaminoglycan chains. Like other members of this matrix family, it is positioned to influence the organization and physical behavior of collagen-rich connective tissues. Its biological identity is therefore tied to the architecture of the matrix rather than to intracellular signaling alone.

Small leucine-rich proteoglycans contain tandem leucine-rich repeats that form curved protein surfaces capable of mediating interactions with extracellular components. Their attached glycosaminoglycans contribute hydration and influence the spacing and mechanical properties of matrix assemblies. Epiphycan is particularly associated with cartilage

and developing skeletal tissues, where proteoglycans participate in the formation and maintenance of a load-bearing extracellular environment. Cartilage must withstand compression while allowing controlled movement of water and solutes, properties that depend on coordinated contributions from aggrecan, collagens, and smaller matrix proteoglycans.

Epiphycan is part of a broader group of matrix proteins whose expression changes during skeletal differentiation and maturation. These proteins can have overlapping structural roles, making it difficult to assign a single tissue-level effect to any one constituent. The timing of epiphycan production, its glycosaminoglycan modification, and its relationships with collagen networks may each influence how it contributes to matrix organization. Distinguishing changes in EPYC expression from changes in proteoglycan processing is important because protein abundance does not fully describe matrix composition. NSJ Bioreagents offers this EPYC Antibody to facilitate study of epiphycan in cartilage matrix development and the organization of collagen-associated proteoglycan networks. A clearer account of epiphycan's molecular partners could illuminate how relatively small matrix components shape the mechanical properties of connective tissue.

Explore related research targets in our Cell Biology Antibodies collection.

Application Notes

Optimal working dilutions for the EPYC Antibody / Epiphycan Antibody should be established experimentally for each assay.

Immunogen

The EPYC Antibody was generated using e. coli-derived human EPYC recombinant protein (amino acids D15-D293).

Storage

The EPYC Antibody is stable for up to one month at 4oC after reconstitution. For longer-term storage, aliquot and store at -20oC for up to six months. Do not repeatedly freeze and thaw.

Alternate Names

EPYC antibody, Epiphycan antibody, DSPG3 antibody, Pg Lb antibody, PGLB antibody, PG-Lb antibody

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