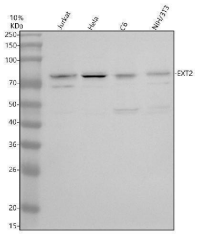
EXT2 Antibody / Exostosin-2 Antibody (FY13556)

Catalog No.	Formulation	Size
FY13556	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	Q93063
Applications	Western blot: 0.5-1ug/ml ELISA: 0.1-0.5 ug/ml
Limitations	Intended solely for research purposes, this EXT2 Antibody / Exostosin-2 Antibody is not for clinical use.



EXT2 Antibody by WB in human and rodent cell lysates. Western blot analysis using Exostosin-2 Antibody detects a major band near 75 kDa in human Jurkat (lane 1), human HeLa (lane 2), rat C6 (lane 3), and mouse NIH/3T3 (lane 4) whole-cell lysates. The observed migration is slightly below the calculated EXT2 molecular weight of approximately 82 kDa. Samples containing 30 ug total protein per lane were separated under reducing conditions by 10% SDS-PAGE and transferred to nitrocellulose. After blocking with 5% nonfat milk, membranes were incubated with primary antibody at 0.5 ug/mL overnight at 4oC and developed using HRP-conjugated secondary antibody and chemiluminescence.

Description

EXT2 Antibody / Exostosin-2 Antibody detects EXT2, a glycosyltransferase that works with exostosin-1 (EXT1) to build heparan sulfate polysaccharide chains. Heparan sulfate is attached to core proteins to form proteoglycans found at cell surfaces and in extracellular matrices. These carbohydrate structures interact with growth factors, morphogens, and matrix components, helping control how extracellular signals are distributed and interpreted.

EXT1 and EXT2 form a complex in the secretory pathway, where they contribute to the alternating addition of glucuronic acid and N-acetylglucosamine residues during heparan sulfate chain elongation. The resulting polysaccharides undergo

additional modifications that shape their binding properties. Because chain synthesis precedes many of these modifications, disruption of EXT2 can affect the abundance and architecture of heparan sulfate rather than a single downstream ligand interaction.

Heparan sulfate proteoglycans participate in signaling pathways involving fibroblast growth factors, hedgehog proteins, WNT proteins, and other extracellular regulators. Their effects depend on tissue location and the detailed structure of the glycan chains. EXT2 function is therefore relevant to cartilage development, skeletal growth, and the organization of signaling gradients during morphogenesis. Pathogenic variants in EXT2 are associated with hereditary multiple osteochondromas, a disorder characterized by cartilage-capped bony outgrowths. EXT1 is another major disease-associated gene in this condition.

Loss of normal EXT2 function may disrupt local heparan sulfate synthesis and the spatial control of growth signals in developing skeletal tissues. The consequences involve interactions among chondrocytes, extracellular matrix, and neighboring cell populations rather than an isolated enzymatic defect. NSJ Bioreagents offers the EXT2 Antibody for work centered on exostosin biology and heparan sulfate metabolism. An EXT2 Antibody can contribute to understanding how glycan synthesis intersects with skeletal development and cell signaling.

Explore related research targets in our Cell Biology Antibodies collection.

Application Notes

The optimal working dilution of the EXT2 Antibody / Exostosin-2 Antibody should be determined empirically by the investigator.

Immunogen

The EXT2 Antibody was generated using e. coli-derived human EXT2 recombinant protein (amino acids E59-K710).

Storage

Following reconstitution, the EXT2 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

EXT2 antibody, Exostosin-2 antibody, exostosin glycosyltransferase 2 antibody, EC:2.4.1.224 antibody, Exostosin 2 antibody, EXT-2 antibody, Glucuronosyl-N-acetylglucosaminyl-proteoglycan 4-alpha-N-acetylglucosaminyltransferase antibody, Heparan sulfate co-polymerase subunit EXT1 antibody

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