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EXT2 Antibody - C-terminal region

Rabbit Polyclonal Antibody
Catalog # AI16103

Product Information

Application	WB
Primary Accession	Q93063
Other Accession	NP_997005
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	82255

Additional Information

Gene ID	2132
Alias Symbol	EXT2,
Other Names	Exostosin-2, 2.4.1.224, 2.4.1.225, Glucuronosyl-N-acetylglucosaminyl-proteoglycan/N-acetylglucosaminyl-proteoglycan 4-alpha-N-acetylglucosaminyltransferase, Multiple exostoses protein 2, Putative tumor suppressor protein EXT2, EXT2
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 &mu, l of distilled water. Final Anti-EXT2 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at -20°C. Avoid repeat freeze-thaw cycles.
Precautions	EXT2 Antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	EXT2 (HGNC:3513)
Function	Glycosyltransferase forming with EXT1 the heterodimeric heparan sulfate polymerase which catalyzes the elongation of the heparan sulfate glycan backbone (PubMed:22660413, PubMed:36402845, PubMed:36593275). Glycan backbone extension consists in the alternating transfer of (1->4)-beta-D-GlcA and (1->4)-alpha-D-GlcNAc residues from their respective UDP-sugar donors. Both EXT1 and EXT2 are required for the full activity of the polymerase since EXT1 bears the N- acetylglucosaminyl-proteoglycan 4-beta-glucuronosyltransferase activity within the complex while EXT2 carries the glucuronosyl-N- acetylglucosaminyl-proteoglycan

	4-alpha-N-acetylglucosaminyltransferase activity (PubMed:36402845, PubMed:36593275). Heparan sulfate proteoglycans are ubiquitous components of the extracellular matrix and play an important role in tissue homeostasis and signaling (PubMed:19344451, PubMed:22660413).
Cellular Location	Golgi apparatus membrane; Single-pass type II membrane protein. Golgi apparatus, cis-Golgi network membrane; Single-pass type II membrane protein. Endoplasmic reticulum membrane; Single-pass type II membrane protein. Secreted {ECO:0000250|UniProtKB:O77783}. Note=The active heparan sulfate polymerase complex composed of EXT1 and EXT2 is localized to the Golgi apparatus. If both proteins are individually detected in the endoplasmic reticulum, the formation of the complex promotes their transport to the Golgi.
Tissue Location	Widely expressed..

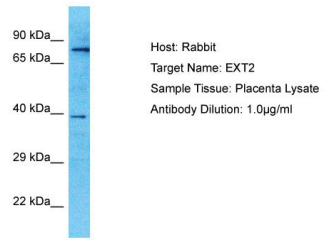
Background

Glycosyltransferase required for the biosynthesis of heparan-sulfate. The EXT1/EXT2 complex possesses substantially higher glycosyltransferase activity than EXT1 or EXT2 alone. Appears to be a tumor suppressor.

References

Stickens D.J.,et al.Nat. Genet. 14:25-32(1996).
Wuyts W.,et al.Hum. Mol. Genet. 5:1547-1557(1996).
Clines G.A.,et al.Genome Res. 7:359-367(1997).
Deng H.-X.,et al.Prog. Nat. Sci. 6:692-699(1996).
Ota T.,et al.Nat. Genet. 36:40-45(2004).

Images



Host: Rabbit
Target Name: EXT2
Sample Tissue: Placenta lysates
Antibody Dilution: 1.0µg/ml