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EXTL3 Rabbit pAb

Catalog # AP99969

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	O43909
Other Accession	O43909
Reactivity	Rat
Predicted	Human, Mouse, Dog, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	104749
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human EXTL3
Epitope Specificity	351-450/919
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the glycosyltransferase 47 family.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	EXTL3 is a member of the EXT (hereditary multiple exostosin) gene family of tumor suppressors encoding glycosyltransferases involved in heparan sulfate (HS) biosynthesis. Within this family, the C-terminus is conserved between all members from C. elegans to vertebrates. EXTL3 is a ubiquitously expressed, developmentally regulated, single-pass type II membrane protein that localizes to the endoplasmic reticulum membrane. EXTL3 adds N-acetylglucosamine (GlcNAc) to the polysaccharide-protein linkage region and to the growing HS chain suggesting that it plays a role in both the initiation and elongation of HS chains. In addition, EXTL3 may act as a Reg receptor, binding Reg via its N-terminus.

Additional Information

Gene ID	2137
Other Names	BOTV; EXTL1L; EXTR1; ISDNA; REGR; RPR; 2900009G18Rik; Ext1l; mKIAA0519; EXTL3_HUMAN; EXTL3; EXT-related protein 1; Glucuronyl-galactosyl-proteoglycan 4-alpha-N-acetylglucosaminyltransferase; Hereditary multiple exostoses gene isolog; Multiple exostosis-like protein 3; Putative tumor suppressor protein EXTL3; 2.4.1.223; KIAA0519; EXTL3_MOUSE; exostosin like glycosyltransferase 3; exostoses (multiple)-like 3; REG receptor
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	EXTL3 {ECO:0000303|PubMed:28397838, ECO:0000312|HGNC:HGNC:3518}
Function	Glycosyltransferase which regulates the biosynthesis of heparan sulfate (HS) (PubMed:28132690, PubMed:28148688). Initiates HS synthesis by transferring the first N-acetyl-alpha-D-glucosamine (alpha-GlcNAc) residue (GlcNAcT-I activity) to the tetrasaccharide linker (GlcA-Gal-Gal-Xyl-)Ser core linker (PubMed:11390981, PubMed:35676258). May also transfer alpha-GlcNAc residues during HS elongation (GlcNAcT-II activity) (PubMed:11390981, PubMed:35676258). Lacks glucuronyl transferase II (GlcAT-II) activity (PubMed:11390981, PubMed:35676258). Important for both skeletal development and hematopoiesis, through the formation of HS proteoglycans (HSPGs) (PubMed:11390981, PubMed:22727489, PubMed:28132690, PubMed:28148688, PubMed:35676258). Through the synthesis of HS, regulates postnatal pancreatic islet maturation and insulin secretion (By similarity).
Cellular Location	Endoplasmic reticulum membrane; Single-pass type II membrane protein. Golgi apparatus. Cell membrane. Nucleus Note=Interaction with REG3A induces its translocation to the nucleus
Tissue Location	Ubiquitous. Expressed in keratinocytes. Expressed in pancreas (PubMed:34099862).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.