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XYLT1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12779a

Product Information

Application	WB, FC, E
Primary Accession	Q86Y38
Other Accession	Q9EPI1, Q811B1, NP_071449.1
Reactivity	Human, Rat, Mouse
Predicted	Mouse, Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB30222
Calculated MW	107569
Antigen Region	126-155

Additional Information

Gene ID	64131
Other Names	Xylosyltransferase 1, Peptide O-xylosyltransferase 1, Xylosyltransferase I, XT-I, XylT-I, XYLT1, XT1
Target/Specificity	This XYLT1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 126-155 amino acids from the N-terminal region of human XYLT1.
Dilution	WB~~1:1000 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	XYLT1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	XYLT1
Synonyms	XT1

Function	Catalyzes the first step in the biosynthesis of chondroitin sulfate and dermatan sulfate proteoglycans, such as DCN. Transfers D- xylose from UDP-D-xylose to specific serine residues of the core protein (PubMed:15461586, PubMed:17189265, PubMed:23982343, PubMed:24581741). Required for normal embryonic and postnatal skeleton development, especially of the long bones (PubMed:23982343, PubMed:24581741). Required for normal maturation of chondrocytes during bone development, and normal onset of ossification (By similarity).
Cellular Location	Golgi apparatus membrane; Single-pass type II membrane protein. Secreted Note=Detected predominantly in the Golgi apparatus
Tissue Location	Widely expressed. Expressed at higher level in placenta, kidney and pancreas. Weakly expressed in skeletal muscle

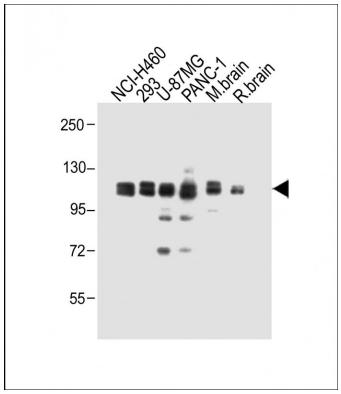
Background

This locus encodes a xylosyltransferase enzyme. The encoded protein catalyzes transfer of UDP-xylose to serine residues of an acceptor protein substrate. This transfer reaction is necessary for biosynthesis of glycosaminoglycan chains. Mutations in this gene have been associated with increased severity of pseudoxanthoma elasticum.

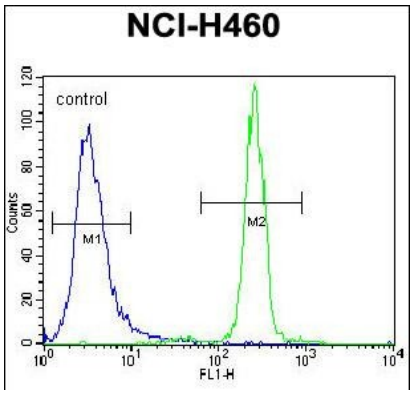
References

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Muller, B., et al. J. Biol. Chem. 284(45):30775-30782(2009)
Ponighaus, C., et al. Am. J. Hypertens. 22(4):432-436(2009)
Ambrosius, M., et al. Clin. Biochem. 42 (1-2), 1-4 (2009) :
Schon, S., et al. J. Med. Genet. 43(9):745-749(2006)

Images



All lanes : Anti-XYLT1 Antibody (N-term) at 1:1000 dilution Lane 1: NCI-H460 whole cell lysate Lane 2: 293 whole cell lysate Lane 3: U-87MG whole cell lysate Lane 4: PANC-1 whole cell lysate Lane 5: Mouse brain whole cell lysate Lane 6: Rat brain whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 108 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



XYLT1 Antibody (N-term) (Cat. #AP12779a) flow cytometric analysis of NCI-H460 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

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