Product Name: B4GT7 Rabbit Polyclonal Antibody
Catalog #: APRab07414

Summary

Production Name	B4GT7 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB
Reactivity	Human,Mouse

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	B4GALT7 XGALT1 UNQ748/PRO1478
Alternative Names	
Gene ID	11285.0
SwissProt ID	Q9UBV7.Synthesized peptide derived from part region of human protein

Application

Dilution Ratio	WB 1:500-2000 ELISA 1:5000-20000
Molecular Weight	35kD

Background

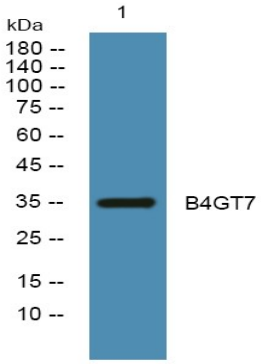
This gene is a member of the beta-1,4-galactosyltransferase (beta4GalT) family. Family members encode type II membrane-bound glycoproteins that appear to have exclusive specificity for the donor substrate UDP-galactose. Each beta4GalT

member has a distinct function in the biosynthesis of different glycoconjugates and saccharide structures. As type II membrane proteins, they have an N-terminal hydrophobic signal sequence that directs the protein to the Golgi apparatus which then remains uncleaved to function as a transmembrane anchor. The enzyme encoded by this gene attaches the first galactose in the common carbohydrate-protein linkage (GlcA-beta1,3-Gal-beta1,3-Gal-beta1,4-Xyl-beta1-O-Ser) found in proteoglycans. This enzyme differs from other beta4GalTs because it lacks the conserved Cys residues found in beta4GalT1-beta4GalT6 and it is located in cis-Golgi instead of trans-Golgi. Mcatalytic activity:UDP-galactose + O-beta-D-xylosylprotein = UDP + 4-beta-D-galactosyl-O-beta-D-xylosylprotein.,cofactor:Manganese.,disease:Defects in B4GALT7 are the cause of progeroid Ehlers-Danlos syndrome (EDS) [MIM:130070]. EDSP is a variant form of Ehlers-Danlos syndrome characterized by progeroid facies, mild mental retardation, short stature, skin hyperextensibility, moderate skin fragility, joint hypermobility principally in digits.,function:Required for the biosynthesis of the tetrasaccharide linkage region of proteoglycans, especially for small proteoglycans in skin fibroblasts.,online information:Beta-1,4-galactosyltransferase 7,online information:GlycoGene database,pathway:Protein modification; protein glycosylation.,similarity:Belongs to the glycosyltransferase 7 family.,subcellular location:Cis cisternae of Golgi stack.,tissue specificity:High expression in heart, pancreas and liver, medium in placenta and kidney, low in brain, skeletal muscle and lung.,

Research Area

Chondroitin sulfate biosynthesis;Heparan sulfate biosynthesis;

Image Data



Western blot analysis of lysates from K562 cells, primary antibody was diluted at 1:1000, 4°over night

Note

For research use only.