





# **B4GT7 Monoclonal Antibody**

| Catalog No         | YP-mAb-05378  |
|--------------------|---|
| Isotype            | IgG   |
| Reactivity         | Human;Mouse   |
| Applications       | WB  |
| Gene Name          | B4GALT7 XGALT1 UNQ748/PRO1478   |
| Protein Name       | Beta-1,4-galactosyltransferase 7 (Beta-1,4-GalTase 7) (Beta4Gal-T7) (b4Gal-T7) (EC 2.4.1) (UDP-Gal:beta-GlcNAc beta-1,4-galactosyltransferase 7) (UDP-galactose:beta-N-acetylglucosamine beta-1,4-gala  |
| Immunogen          | Synthesized peptide derived from part region of human protein   |
| Specificity        | B4GT7 Monoclonal Antibody detects endogenous levels of protein.   |
| Formulation        | Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.  |
| Source             | Monoclonal, Mouse,IgG   |
| Purification       | The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.  |
| Dilution           | WB 1:500-1:2000   |
| Concentration      | 1 mg/ml   |
| Purity             | ≥90%  |
| Storage Stability  | -20°C/1 year  |
| Synonyms           |   |
| Observed Band      | 35kD  |
| Cell Pathway       | Golgi apparatus, Golgi stack membrane; Single-pass type II membrane protein.<br>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.  |
| Function           | catalytic activity:UDP-galactose + O-beta-D-xylosylprotein = UDP + 4-beta-D-galactosyl-O-beta-D-xylosylprotein.,cofactor:Manganese.,disease:Defec ts 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 |
|                    |   |



# UpingBio technology Co.,Ltd



(e) Website: www.upingBio.com

## **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-beta1,4-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. M

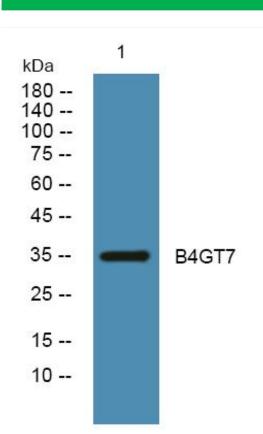
#### matters needing attention

Avoid repeated freezing and thawing!

### **Usage suggestions**

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

# **Products Images**



Western Blot analysis of various cells using B4GT7 Monoclonal Antibody