

Product datasheet for CF807809

OriGene Technologies, Inc.

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B4GALT4 Mouse Monoclonal Antibody [Clone ID: OTI8B6]

Product data:

Product Type: Primary Antibodies

Clone Name: OTI8B6
Applications: IHC, WB

Recommended Dilution: WB 1:500, IHC 1:150

Reactivity: Human
Host: Mouse
Isotype: IgG1

Clonality: Monoclonal

Immunogen: Human recombinant protein fragment corresponding to amino acids 40-322 of human

B4GALT4(NP_003769) produced in E.coli.

Formulation: Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)

Reconstitution Method: For reconstitution, we recommend adding 100uL distilled water to a final antibody

concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)

Purification: Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Conjugation: Unconjugated

Storage: Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

Predicted Protein Size: 39.9 kDa

Gene Name: beta-1,4-galactosyltransferase 4

Database Link: NP 003769

Entrez Gene 8702 Human

<u>060513</u>





Background:

This gene is one of seven beta-1,4-galactosyltransferase (beta4GalT) genes. They encode type II membrane-bound glycoproteins that appear to have exclusive specificity for the donor substrate UDP-galactose; all transfer galactose in a beta1,4 linkage to similar acceptor sugars: GlcNAc, Glc, and Xyl. Each beta4GalT 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 and which then remains uncleaved to function as a transmembrane anchor. By sequence similarity, the beta4GalTs form four groups: beta4GalT1 and beta4GalT2, beta4GalT3 and beta4GalT4, beta4GalT5 and beta4GalT6, and beta4GalT7. The enzyme encoded by this gene appears to mainly play a role in glycolipid biosynthesis. Two alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Jul 2008]

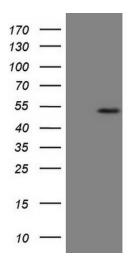
Synonyms: B4Gal-T4; beta4Gal-T4

Protein Families: Transmembrane

Protein Pathways: Glycosphingolipid biosynthesis - lacto and neolacto series, Keratan sulfate biosynthesis,

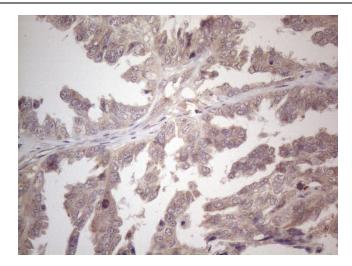
Metabolic pathways

Product images:

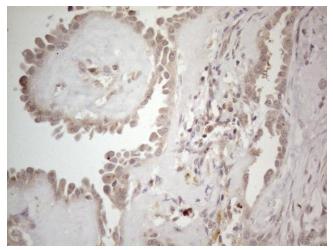


HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY B4GALT4 (Cat# [RC209493], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-B4GALT4 (Cat# [TA807809])(1:500). Positive lysates [LY418441] (100ug) and [LC418441] (20ug) can be purchased separately from OriGene.

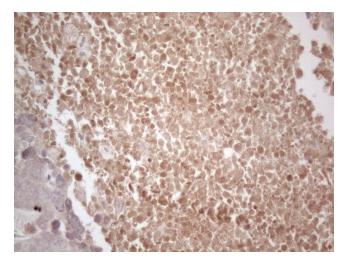




Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human ovary tissue using anti-B4GALT4 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, [TA807809]) (1:150)



Immunohistochemical staining of paraffinembedded Carcinoma of Human thyroid tissue using anti-B4GALT4 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, [TA807809]) (1:150)



Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human endometrium tissue using anti-B4GALT4 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, [TA807809]) (1:150)