Data Sheet (Cat.No.TMAB-06307)

Anti-GALNT12 Polyclonal Antibody

Product Details

Ig Type:	IgG
Reactivity:	Human,Mouse (predicted:Rat,Chicken,Dog,Pig,Horse,Rabbit)
Molecular Weight:	Theoretical: 67 kDa. Actual: 64 kDa.
Purification:	Protein A purified

Applications

Verified Activity:	1. Sample: MCF-7 (Human) Cell Lysate at 40 µg Primary: Anti-GALNT12 (TMAB-06307) at 1/300 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 67 kD Observed band size: 67 kD 2. Sample: Pancreas (Mouse) Lysate at 40 µg Primary: Anti-GALNT12 (TMAB-06307) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 67 kD Observed band size: 64 kD
Application:	WB
Recommended	WB: 1:500-2000

Properties

Stability & Storage:	Store at 2°C-8°C for 1 month. Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen:	KLH conjugated synthetic peptide: human GALNT12/GalNAc-T12
Antigen Species:	Human
Gene ID:	79695
Uniprot ID:	Q8IXK2

Research Background

The UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase (GalNAc-T) family of enzymes are substrate-specific proteins that catalyze the transfer of GalNAc (N-acetylgalactosamine) to serine and threonine residues onto various proteins, thereby initiating mucin-type O-linked glycosylation in the Golgi apparatus. GalNAc-T12 (Polypeptide N-acetylgalactosaminyltransferase 12), also known as UDP-GalNAc: polypeptide N-acetylgalactosaminyltransferase 12, is a 581 amino acid protein that displays enzymatic activity towards non-glycosylated peptides such as Muc5Ac, Muc1a and EA2 with no detectable activity towards Muc2 and Muc7. The N-terminal domain is involved in substrate binding and manganese coordination, while the C-terminal domain is involved in UDP-Gal binding and catalytic reaction. Since GalNAc-T12 is highly expressed in stomach, pancreas, small intestine and colon, it may play a significant role in the initial step of mucin-type oligosaccharide

biosynthesis in digestive organs.