

COLGALT1 Rabbit pAb

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Catalog # AP55152

Product Information

Application	WB
Primary Accession	Q8NBJ5
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	71636
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human GLT25D1
Epitope Specificity	531-622/622
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Endoplasmic reticulum lumen. Note: Colocalized with PLOD3 and mannose binding lectin.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	GLT25D1 is a 622 amino acid protein that localizes to the lumen of the endoplasmic reticulum. Ubiquitously expressed with higher levels in placenta, heart, lung and spleen, GLT25D1 is a member of the glycosyltransferase 25 family. The beta-galactosyltransferase activity of GLT25D1 allows the transfer of beta-galactose to hydroxylysine residues of collagen. GLT25D1 is considered an important target for investigating the biological significance of collagen glycosylation and the importance of posttranslational modification in the etiology of connective tissue disorders. The gene encoding GLT25D1 is located on human chromosome 19, which consists of over 63 million bases, houses approximately 1,400 genes and is recognized for having the greatest gene density of the human chromosomes.

Additional Information

Gene ID	79709
Other Names	Procollagen galactosyltransferase 1, 2.4.1.50, Collagen beta(1-O)galactosyltransferase 1, ColGalT 1, Glycosyltransferase 25 family member 1, Hydroxylysine galactosyltransferase 1, COLGALT1, GLT25D1
Dilution	WB=1:500-2000,ELISA=1:5000-10000,ICC/IF=1:50-200
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

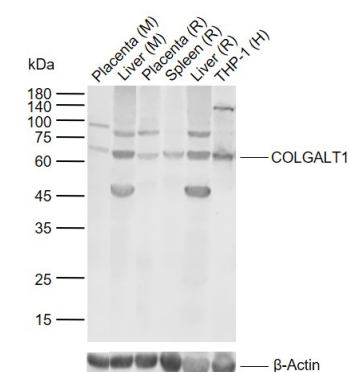
Protein Information

Name	COLGALT1
Synonyms	GLT25D1
Function	Beta-galactosyltransferase that transfers beta-galactose to hydroxylysine residues of type I collagen (PubMed: 19075007 , PubMed: 22216269 , PubMed: 27402836). By acting on collagen glycosylation, facilitates the formation of collagen triple helix (PubMed: 27402836). Also involved in the biosynthesis of collagen type IV (PubMed: 30412317).
Cellular Location	Endoplasmic reticulum lumen {ECO:0000255 PROSITE- ProRule:PRU10138, ECO:0000269 PubMed:20470363}. Note=Colocalized with PLOD3 and mannose binding lectin/MBL2.
Tissue Location	Ubiquitous with higher levels in placenta, heart, lung and spleen.

Background

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Images



Sample:

Lane 1: Mouse Placenta tissue lysates

Lane 2: Mouse Liver tissue lysates

Lane 3: Rat Placenta tissue lysates

Lane 4: Rat Spleen tissue lysates

Lane 5: Rat Liver tissue lysates

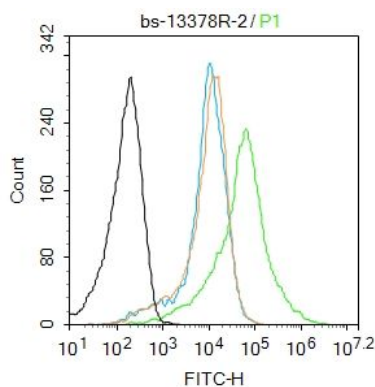
Lane 6: Human THP-1 cell lysates

Primary: Anti-COLGALT1 (AP55152) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 69 kDa

Observed band size: 68 kDa



Blank control: Mouse spleen.

Primary Antibody (green line): Rabbit Anti-GLT25D1 antibody (AP55152)

Dilution: $2 \mu\text{g} / 10^6$ cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody : Goat anti-rabbit IgG-AF488

Dilution: $1 \mu\text{g} / \text{test}$.

Protocol

The cells were fixed with 70% ethanol (10min at room temperature) and then were incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.

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