

Rabbit Anti-A4GALT antibody

SL7588R

Product Name:	A4GALT
Chinese Name:	α1,4- 半乳糖基 转 移 酶1
Alias:	4 N acetylglucosaminyltransferase; 4-galactosyltransferase; 4-N-acetylglucosaminyltransferase; A14GALT; A4GALT; A4GALT; A4GALT; A4GAT_HUMAN; Alpha 1 4 galactosyltransferase; Alpha 1 4 N acetylglucosaminyltransferase; Alpha-1; Alpha4Gal T1; Alpha4Gal-T1; CD 77; CD77 synthase; GB3 synthase; Gb3S; Globotriaosylceramide synthase; Lactosylceramide 4 alpha galactosyltransferase; Lactosylceramide 4-alpha-galactosyltransferase; P blood group (P one antigen); P(k) antigen synthase; P1; P1/Pk synthase; PK; UDP galactose beta D galactosyl beta 1 R 4 alpha D galactosyltransferase; UDP-galactose:beta-D-galactosyl-beta 1-R 4-alpha-D-galactosyltransferase.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Dog, Pig,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1ug/TestIF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	40kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated synthetic peptide derived from human A4GALT/CD77:291-353/353
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. 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.

PubMed:

PubMed

Necessary for the biosynthesis of the Pk antigen of blood histogroup P. Catalyzes the transfer of galactose to lactosylceramide and galactosylceramide. Necessary for the synthesis of the receptor for bacterial verotoxins. Expression of CD77, also called Gb3, sensitizes a cell to verotoxins, causing cellular injury that can lead to disease. Therefore, the complex regulation of CD77 biosynthesis and the activity of the enzymes involved, such as CD77 synthase, can be studied by compared gene expression between toxinsensitive and insensitive tissues and cell lines. The highest tissue expression of CD77 synthase occurs in the kidney, mesenteric lymph node, spleen, and brain. Burkitt leukemia cells express very high levels of CD77 as well as CD77 synthase, and are sensitive to verotoxin induced apoptosis. These megakaryoblasts then never mature, leading to the arrest of platelet generation in the bone marrow, which may cause thrombocytopenia, a symptom associated with various hemorrhagic conditions.

Function:

Necessary for the biosynthesis of the Pk antigen of blood histogroup P. Catalyzes the transfer of galactose to lactosylceramide and galactosylceramide. Necessary for the synthesis of the receptor for bacterial verotoxins.

Subcellular Location:

Golgi apparatus membrane; Single-pass type II membrane protein (Probable).

Product Detail:

Tissue Specificity:

Ubiquitous. Highly expressed in kidney, heart, spleen, liver, testis and placenta.

Similarity:

Belongs to the glycosyltransferase 32 family.

SWISS:

O9NPC4

Gene ID:

53947

Database links:

Entrez Gene: 53947Human

Entrez Gene: 239559 Mouse

Entrez Gene: 63888Rat

Omim: 607922Human

SwissProt: Q9NPC4Human

SwissProt: Q67BJ4Mouse

SwissProt: Q9JI93Rat

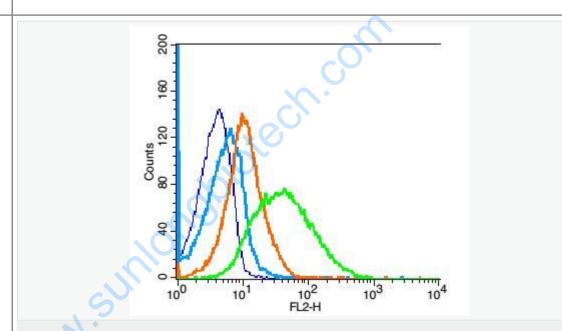
Unigene: 105956Human

Unigene: 323805 Mouse

Unigene: 48584Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



Picture:

Blank control(blue):mouse spleen cells (fixed with 2% paraformaldehyde (10 min),

then permeabilized with 90% ice-cold methanol for 30 min on ice).

Primary Antibody: Rabbit Anti- A4GALT antibody(SL7588R), Dilution: 1µg in 100

μL 1X PBS containing 0.5% BSA;

 $Isotype\ Control\ Antibody:\ Rabbit\ IgG(orange)\ , used\ under\ the\ same\ conditions\);$

Secondary Antibody: Goat anti-rabbit IgG-PE(white blue), Dilution: 1:200 in 1 X

PBS containing 0.5% BSA.