

Product name:	A4GAT Rabbit Polyclonal Antibody
Cat number:	ABN06371
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	Synthesized peptide derived from part region of human protein
Reactivity:	Human,Rat,Mouse
Applications:	WB 1:500-1:2000,ELISA 1:5000-1:20000
Molecular Weight:	38kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.
Background:	alpha 1,4-galactosyltransferase(A4GALT) Homo sapiens The protein encoded by this gene catalyzes the transfer of galactose to lactosylceramide to form globotriaosylceramide, which has been identified as the P(k) antigen of the P blood group system. This protein, a type II membrane protein found in the Golgi, is also required for the synthesis of the bacterial verotoxins receptor. Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Dec 2015],catalytic activity:UDP-galactose + beta-D-galactosyl-(1->4)-D-glucosyl-(1->1)-ceramide = UDP + alpha-D-galactosyl-(1->4)-beta-D-galactosyl-(1->4)-D-glucosyl-(1->1)-ceramide.,domain:The conserved DXD motif is involved in enzyme activity.,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.,online information:GlycoGene database,online information:Lactosylceramide 4-alpha-galactosyltransferase,pathway:Protein modification; protein glycosylation.,polymorphism:Different combinations or absence of the P blood group system antigens define 5 different phenotypes: P1, P2, P1(k), P2(k), and p. Genetic variation in A4GALT determines the p phenotype, which is rare and does not express any antigens. It is also known as null phenotype; p individuals have antibodies against P, P1 and Pk antigens in their sera. These antibodies are clinically important because they can cause severe transfusion reactions and miscarriage.,similarity:Belongs to the glycosyltransferase 32 family.,tissue specificity:Ubiquitous. Highly expressed in kidney, heart, spleen, liver, testis and placenta.,