

Product name:	FUT2 Rabbit Polyclonal Antibody
Cat number:	ABN11189
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	Synthesized peptide derived from the Internal region of human FUT2.
Reactivity:	Human,Rat,Mouse
Applications:	IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:10000-1:20000
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA 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:	<p>The protein encoded by this gene is a Golgi stack membrane protein that is involved in the creation of a precursor of the H antigen, which is required for the final step in the soluble A and B antigen synthesis pathway. This gene is one of two encoding the galactoside 2-L-fucosyltransferase enzyme. Two transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, Jul 2008],catalytic activity:GDP-beta-L-fucose + beta-D-galactosyl-(1->3)-N-acetyl-beta-D-glucosaminyl-(1->3)-beta-D-galactosyl-(1->4)-beta-D-glucosyl-(1->1)-ceramide = GDP + alpha-L-fucosyl-(1->2)-beta-D-galactosyl-(1->3)-N-acetyl-beta-D-glucosaminyl-(1->3)-beta-D-galactosyl-(1->4)-beta-D-glucosyl-(1->1)-ceramide.,disease:Genetic variation in FUT2 is associated with vitamin B12 plasma level quantitative trait locus type 1 (B12QTL1) [MIM:612542]. The plasma level of vitamin B12 is a modifiable quantitative trait associated with many diseases. Vitamin B12 found in meat and milk products is composed of corrin and cobalt rings and is necessary for the formation of red blood cells, DNA synthesis during cell division, and maintenance of the myelin nerve sheath, among other functions. Deficiency in vitamin B12, clinically associated with pernicious anemia, cardiovascular disease, cancer, and neurodegenerative disorders, is often related to poor intestinal B12 absorption rather than direct dietary deficiency.,function:Creates a soluble precursor oligosaccharide FuC-alpha ((1,2)Galbeta-) called the H antigen which is an essential substrate for the final step in the soluble A and B antigen synthesis pathway. H and Se enzymes fucosylate the same acceptor substrates but exhibit different Km values.,miscellaneous:There are two genes (FUT1 and FUT2) which encode galactoside 2-L-fucosyltransferase. They are expressed in a tissue-specific manner with expression restricted to cells of mesodermal or endodermal origin respectively.,online information:Blood group antigen gene mutation database,online information:Fucosyltransferase 2,online information:GlycoGene database,pathway:Protein modification; protein glycosylation.,polymorphism:Three alleles have been identified in Japanese: Se1, Se2, and Sej.,similarity:Belongs to the glycosyltransferase 11 family.,subcellular location:Membrane-bound form in trans cisternae of Golgi.,tissue specificity:Small intestine, colon and lung.,</p>