

## Human Fucosyltransferase 3/5 (FUT3/5) Lumenal Domain Antibody

Antigen Affinity-purified Polyclonal Sheep IgG Catalog Number: AF4068

DESCRIPTION			
Species Reactivity	Human		
Specificity	Detects human FUT3 and human FUT5 in direct ELISAs and Western blots.		
Source	Polyclonal Sheep IgG		
Purification	Antigen Affinity-purified		
Immunogen	Mouse myeloma cell line NS0-derived recombinant human FUT5 Arg35-Thr374 Accession # Q11128		
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.		

## **APPLICATIONS**

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	0.1 μg/mL	Recombinant Human Fucosyltransferase 3/FUT3 (Catalog # 4950-GT) Recombinant Human Fucosyltransferase 5/FUT5 (Catalog # 4949-GT)
Immunoprecipitation	25 µg/mL	Conditioned cell culture medium spiked with Recombinant Human Fucosyltransferase 3/FUT3 (Catalog # 4950-GT), see our available Western blot detection antibodies

PREPARATION AND STORAGE		
Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.	
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C	
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.	
	• 12 months from date of receipt, -20 to -70 °C as supplied.	
	<ul> <li>1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> </ul>	
	<ul> <li>6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>	

## BACKGROUND

FUT5 (α-1, 3-fucosyltransferase 5; also Fuc-TV) is a 43 kDa member of the glycosyltransferase 10 family. It is responsible for the terminal step in the synthesis of Le<sup>x</sup>, sialyl-Le<sup>x</sup>, and Le<sup>a</sup> antigens. This is accomplished by the transfer of fucose to preexisting LacNAc or sialyl-LacNAc structures. Human FUT5 is 374 amino acids (aa) in length. It is a type II transmembrane Golgi glycoprotein with a C-terminal lumenal domain (aa's 35-374). The catalytic domain spans aa's 77-374, while the acceptor-binding motif includes aa's 120-126. FUT5 is the product of a single exon gene. Thus, there are no splice variants. FUT5 only occurs in primates; there is no rodent ortholog.

