



Biotinylated Anti-human FUT3/5 Antibody

ORDERING INFORMATION

Catalog Number: BAF4068

Lot Number: CDKF01

Size: 50 µg

Formulation: 0.2 µm filtered solution in PBS with BSA

Storage: -20° C

Reconstitution: sterile 0.1% BSA in TBS

Specificity: human FUT3/5 luminal domain

Immunogen: NS0-derived rhFUT5 luminal domain

Ig Type: sheep IgG

Application: Western blot

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^x, sialyl-Le^x, and Le^a 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 luminal 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.

Preparation

Produced in sheep immunized with purified, NS0-derived, recombinant human FUT5 luminal domain (rhFUT5; Accession # Q11128). Human FUT3/5 specific IgG was purified by human FUT5 affinity chromatography and then biotinylated.

Formulation

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) containing 50 µg of bovine serum albumin (BSA) per 1 µg of antibody.

Reconstitution

Reconstitute with sterile Tris-buffered saline pH 7.3 (20 mM Trizma base, 150 mM NaCl) containing 0.1% BSA. If 1 mL of buffer is used, the antibody concentration will be 50 µg/mL.

Storage

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C **in a manual defrost freezer** for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

Specificity

This antibody has been selected for use as a detection antibody in human FUT3 and human FUT5 Western blots.

Application

Western blot - This antibody can be used at 0.1 - 0.2 µg/mL with the appropriate secondary reagents to detect human FUT3/5. The detection limit for rhFUT3 and rhFUT5 is approximately 1 ng/lane under non-reducing and reducing conditions.

Optimal dilutions should be determined by each laboratory for each application.