

# Anti-FUT1 Picoband Antibody

Catalog # ABO12279

## Product Information

|                          |                                                                                                                                          |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Application</b>       | WB, IHC-P                                                                                                                                |
| <b>Primary Accession</b> | <a href="#">P19526</a>                                                                                                                   |
| <b>Host</b>              | Rabbit                                                                                                                                   |
| <b>Reactivity</b>        | Human, Mouse, Rat                                                                                                                        |
| <b>Clonality</b>         | Polyclonal                                                                                                                               |
| <b>Format</b>            | Lyophilized                                                                                                                              |
| <b>Description</b>       | Rabbit IgG polyclonal antibody for Galactoside 2-alpha-L-fucosyltransferase 1(FUT1) detection. Tested with WB, IHC-P in Human;Mouse;Rat. |

**Reconstitution** Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

## Additional Information

|                                 |                                                                                                                                                                                                                     |
|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene ID</b>                  | 2523                                                                                                                                                                                                                |
| <b>Other Names</b>              | Galactoside 2-alpha-L-fucosyltransferase 1, 2.4.1.69, Alpha(1, 2)FT 1, Blood group H alpha 2-fucosyltransferase, Fucosyltransferase 1, GDP-L-fucose:beta-D-galactoside 2-alpha-L-fucosyltransferase 1, FUT1, H, HSC |
| <b>Calculated MW</b>            | 41251                                                                                                                                                                                                               |
| <b>Application Details</b>      | Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat<br><br>Western blot, 0.1-0.5 µg/ml, Human, Rat                                                                             |
| <b>Subcellular Localization</b> | Golgi apparatus, Golgi stack membrane; Single-pass type II membrane protein. Membrane-bound form in trans cisternae of Golgi.                                                                                       |
| <b>Source</b>                   | Eukaryota                                                                                                                                                                                                           |
| <b>Protein Name</b>             | Galactoside 2-alpha-L-fucosyltransferase 1                                                                                                                                                                          |
| <b>Contents</b>                 | Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na <sub>2</sub> HPO <sub>4</sub> , 0.05mg NaN <sub>3</sub> .                                                                                                    |
| <b>Immunogen</b>                | A synthetic peptide corresponding to a sequence at the N-terminus of human FUT1 (134-164aa EVDSRTPWRELQLHDWMSEYADLRDPFLKL), different from the related mouse and rat sequences by seven amino acids.                |
| <b>Purification</b>             | Immunogen affinity purified.                                                                                                                                                                                        |

|                              |                                                                                                                                                                                       |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Cross Reactivity</b>      | No cross reactivity with other proteins                                                                                                                                               |
| <b>Storage</b>               | At -20 °C for one year. After r ° Constitution, at 4 °C for one month. It ° Can also be aliquotted and stored frozen at -20 °C for a longer time.Avoid repeated freezing and thawing. |
| <b>Sequence Similarities</b> | Belongs to the glycosyltransferase 11 family.                                                                                                                                         |

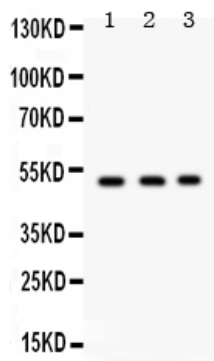
## Protein Information

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Name</b>              | FUT1 ( <a href="#">HGNC:4012</a> )                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Synonyms</b>          | H, HSC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Function</b>          | Catalyzes the transfer of L-fucose, from a guanosine diphosphate-beta-L-fucose, to the terminal galactose residue of glycoconjugates through an alpha(1,2) linkage leading to H antigen synthesis that is an intermediate substrate in the synthesis of ABO blood group antigens (PubMed: <a href="#">2118655</a> ). H antigen is essential for maturation of the glomerular layer of the main olfactory bulb, in cell migration and early cell-cell contacts during tumor associated angiogenesis (PubMed: <a href="#">18205178</a> ). Preferentially fucosylates soluble lactose and to a lesser extent fucosylates glycolipids gangliosides GA1 and GM1a (By similarity). |
| <b>Cellular Location</b> | Golgi apparatus, Golgi stack membrane {ECO:0000250 UniProtKB:O09160}; Single-pass type II membrane protein {ECO:0000250 UniProtKB:O09160}. Note=Membrane-bound form in trans cisternae of Golgi. {ECO:0000250 UniProtKB:O09160}                                                                                                                                                                                                                                                                                                                                                                                                                                              |

## Background

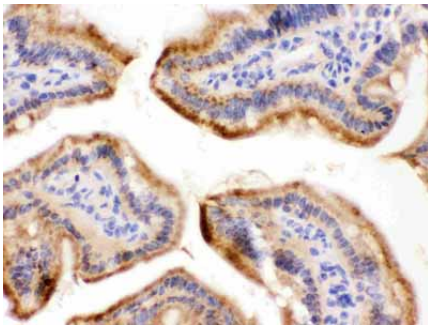
Galactoside 2-alpha-L-fucosyltransferase 1 is an enzyme that in humans is encoded by the FUT1 gene. It is mapped to 19q13.3. The protein encoded by this gene is a Golgi stack membrane protein that is involved in the creation of a precursor of the H antigen, which is required for the final step in the soluble A and B antigen synthesis pathway. This gene is one of two encoding the galactoside 2-L-fucosyltransferase enzyme. Mutations in this gene are a cause of the H-Bombay blood group.

## Images

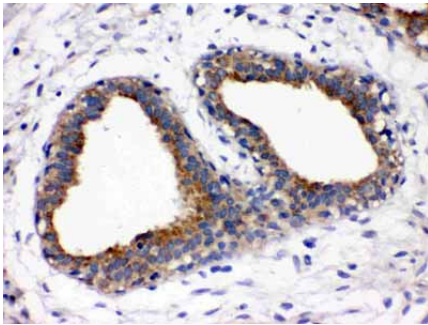
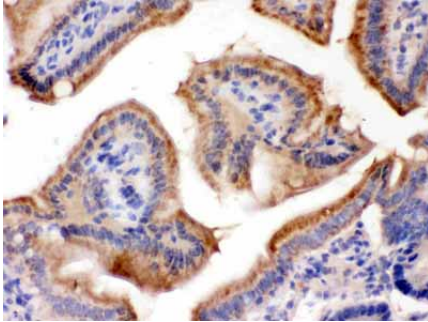


Anti- FUT1 Picoband antibody, ABO12279, Western blottingAll lanes: Anti FUT1 (ABO12279) at 0.5ug/mlLane 1: Rat Kidney Tissue Lysate at 50ugLane 2: SW620 Whole Cell Lysate at 40ugLane 3: A549 Whole Cell Lysate at 40ugPredicted bind size: 50KDObserved bind size: 50KD

Anti- FUT1 Picoband antibody, ABO12279, IHC(P)IHC(P): Mouse Intestine Tissue



Anti- FUT1 Picoband antibody, ABO12279, IHC(P)IHC(P):  
Rat Intestine Tissue



Anti- FUT1 Picoband antibody, ABO12279, IHC(P)IHC(P):  
Human Mammary Cancer Tissue

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.