

**Blood Group Lewis b Polyclonal Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP55008****Specification****Blood Group Lewis b Polyclonal Antibody - Product Information**

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	<a href="#">P21217</a>
Host	Rabbit
Clonality	Polyclonal
Calculated MW	42117

**Blood Group Lewis b Polyclonal Antibody - Additional Information****Gene ID** 2525**Other Names**

3-galactosyl-N-acetylglucosaminide 4-alpha-L-fucosyltransferase FUT3, 2.4.1.65, Alpha-3-fucosyltransferase FUT3, 2.4.1.-, Blood group Lewis alpha-4-fucosyltransferase, Lewis FT, Fucosyltransferase 3, Fucosyltransferase III, FucT-III, FUT3 ([http://www.genenames.org/cgi-bin/gene\\_symbol\\_report?hgnc\\_id=4014](http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=4014)), FT3B, LE

**Dilution**

IHC-P ~ N/A  
IHC-F ~ N/A  
IF ~ 1:50 ~ 200  
ICC ~ N/A  
E ~ N/A

**Format**

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

**Storage**

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

**Blood Group Lewis b Polyclonal Antibody - Protein Information****Name** FUT3 ([HGNC:4014](#))**Synonyms** FT3B, LE**Function**

Catalyzes the transfer of L-fucose, from a guanosine diphosphate-beta-L-fucose, to both the subterminal N-acetyl glucosamine (GlcNAc) of type 1 chain (beta-D-Gal-(1->3)-beta-D-GlcNAc) glycolipids and oligosaccharides via an alpha(1,4) linkage, and the subterminal glucose (Glc) or GlcNAc of type 2 chain (beta-D-Gal-(1->4)-beta-D- GlcNAc) oligosaccharides via an alpha(1,3) linkage, independently of the presence of terminal alpha-L-fucosyl-(1,2) moieties on the terminal

galactose of these acceptors (PubMed:<a href="http://www.uniprot.org/citations/11058871" target="\_blank">11058871</a>, PubMed:<a href="http://www.uniprot.org/citations/12668675" target="\_blank">12668675</a>, PubMed:<a href="http://www.uniprot.org/citations/1977660" target="\_blank">1977660</a>). Through its catalytic activity, participates in the synthesis of antigens of the Lewis blood group system, i.e. Lewis a (Le(a)), Lewis b (Le(b)), Lewis x/SSEA-1 (Le(x)) and Lewis y (Le(y)) antigens (PubMed:<a href="http://www.uniprot.org/citations/11058871" target="\_blank">11058871</a>, PubMed:<a href="http://www.uniprot.org/citations/12668675" target="\_blank">12668675</a>, PubMed:<a href="http://www.uniprot.org/citations/1977660" target="\_blank">1977660</a>). Also catalyzes the transfer of L-fucose to subterminal GlcNAc of sialyl- and disialyl-lactotetraosylceramide to produce sialyl Lewis a (sLe(a)) and disialyl Lewis a via an alpha(1,4) linkage and therefore may regulate cell surface sLe(a) expression and consequently regulates adhesive properties to E-selectin, cell proliferation and migration (PubMed:<a href="http://www.uniprot.org/citations/11058871" target="\_blank">11058871</a>, PubMed:<a href="http://www.uniprot.org/citations/12668675" target="\_blank">12668675</a>, PubMed:<a href="http://www.uniprot.org/citations/27453266" target="\_blank">27453266</a>). Catalyzes the transfer of an L-fucose to 3'-sialyl-N-acetyllactosamine by an alpha(1,3) linkage, which allows the formation of sialyl-Lewis x structure and therefore may regulate the sialyl-Lewis x surface antigen expression and consequently adhesive properties to E-selectin (PubMed:<a href="http://www.uniprot.org/citations/11058871" target="\_blank">11058871</a>, PubMed:<a href="http://www.uniprot.org/citations/29593094" target="\_blank">29593094</a>). Prefers type 1 chain over type 2 acceptors (PubMed:<a href="http://www.uniprot.org/citations/7721776" target="\_blank">7721776</a>). Type 1 tetrasaccharide is a better acceptor than type 1 disaccharide suggesting that a beta anomeric configuration of GlcNAc in the substrate is preferred (PubMed:<a href="http://www.uniprot.org/citations/7721776" target="\_blank">7721776</a>). Lewis- positive (Le(+)) individuals have an active enzyme while Lewis-negative (Le(-)) individuals have an inactive enzyme (PubMed:<a href="http://www.uniprot.org/citations/1977660" target="\_blank">1977660</a>).

#### Cellular Location

Golgi apparatus, Golgi stack membrane; Single- pass type II membrane protein  
Note=Membrane-bound form in trans cisternae of Golgi

#### Tissue Location

Highly expressed in stomach, colon, small intestine, lung and kidney and to a lesser extent in salivary gland, bladder, uterus and liver.

### Blood Group Lewis b Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Blood Group Lewis b Polyclonal Antibody - Images