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BG8,Lewisy

Mouse Monoclonal antibody(Mab)
Catalog # AD80360

Product Information

Application	IHC-P
Primary Accession	P21217
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	233L1D5
Calculated MW	42117

Additional Information

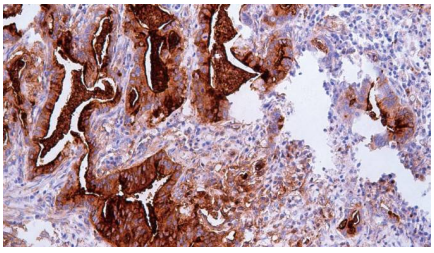
Gene ID	2525
Gene Name	FUT3
Other Names	3-galactosyl-N-acetylglucosaminide 4-alpha-L-fucosyltransferase FUT3, 2.4.1.65, 4-galactosyl-N-acetylglucosaminide 3-alpha-L-fucosyltransferase, 2.4.1.152, Alpha-3-fucosyltransferase FUT3, 2.4.1.-, Blood group Lewis alpha-4-fucosyltransferase, Lewis FT, Fucosyltransferase 3, Fucosyltransferase III, FucT-III, FUT3 (HGNC:4014), FT3B, LE
Dilution	IHC-P~~Ready-to-use
Storage	Maintain refrigerated at 2-8°C.
Precautions	BG8,Lewisy Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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:11058871, PubMed:12668675, PubMed:1977660). 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:11058871, PubMed:12668675, PubMed:1977660). 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:11058871, PubMed:12668675, PubMed:27453266). 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:11058871, PubMed:29593094). Prefers type 1 chain over type 2 acceptors (PubMed:7721776). 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:7721776). Lewis- positive (Le(+)) individuals have an active enzyme while Lewis-negative (Le(-)) individuals have an inactive enzyme (PubMed:1977660).
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.

Images



Immunohistochemical analysis of formalin-fixed and paraffin-embedded human lung adenocarcinoma tissue was performed with BG8,Lewisy primary antibody, followed by peroxidase-conjugated secondary antibody and DAB staining.

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