

# Lewis-B Monoclonal Mouse Antibody (2-25LE)

## Product Description

The Lewis histo-blood group system comprises a set of fucosylated glycosphingolipids that are synthesized by exocrine epithelial cells and circulate in body fluids. The glycosphingolipids function in embryogenesis, tissue differentiation, tumor metastasis, inflammation, and bacterial adhesion. They are secondarily absorbed to red blood cells giving rise to their Lewis phenotype. This gene is a member of the fucosyltransferase family, which catalyzes the addition of fucose to precursor polysaccharides in the last step of Lewis antigen biosynthesis. It encodes an enzyme with alpha(1,3)-fucosyltransferase and alpha(1,4)-fucosyltransferase activities. Lewis blood group antigens are carbohydrate moieties structurally integrated in mucous secretions. Lewis antigen system alterations have been described in gastric carcinoma and associated lesions. Anomalous expression of Lewis B antigen has been found in some non-secretory gastric carcinomas and colorectal cancers.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the [CF® Dye Brochure](#) for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

**Stock status:** Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email [order@biotium.com](mailto:order@biotium.com) to inquire about stock status and lead times before placing your order.

**Catalog number key for antibody number 1008, Anti-Lewis-B (2-25LE)**

## Product attributes

Antibody number	#1008
Antibody reactivity (target)	Lewis-B
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	2-25LE
Isotype	IgG1, kappa
Molecular weight	45 kDa
Synonyms	Blood group Lewis alpha-4-fucosyltransferase; Fucosyltransferase 3; Fucosyltransferase III; FucT-III; FUT3; Galactoside 3(4)-L-fucosyltransferase; gastric mucin; leB; lewis antigen system; lewis B blood group antigen; Lewis FT; major airway glycoprotein
Human gene symbol	FUT3
Entrez gene ID	2525
SwissProt	P21217
Unigene	169238
Immunogen	Mucin isolated from a human ovarian cyst fluid
Antibody target cellular localization	Cytoplasmic
Verified antibody applications	IHC (FFPE) (verified)
Species reactivity	Guinea pig, Human, Pig
Antibody application notes	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody. Immunofluorescence: 0.5-1 ug/mL, Immunohistology formalin-fixed 0.5-1 ug/mL, Staining of formalin-fixed tissues is enhanced by boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes. Optimal dilution for a specific application should be determined by user
Positive control	Colon
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Regulatory status	For research use only (RUO)
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
Antibody research areas	Cancer
Cell/tissue expression	Epithelial cells
Tumor expression	Colorectal cancer, Gastrointestinal cancer

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	<a href="#">CF®405S Features</a>
BNC88	CF®488A	490/515	488	GFP, FITC	<a href="#">CF®488A Features</a>
BNC68	CF®568	562/583	532, 561	RFP, TRITC	<a href="#">CF®568 Features</a>
BNC94	CF®594	593/614	561	Texas Red®	<a href="#">CF®594 Features</a>
BNC40	CF®640R	642/662	633-640	Cy®5	<a href="#">CF®640R Features</a>
BNC47	CF®647	650/665	633-640	Cy®5	<a href="#">CF®647 Features</a>
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	

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