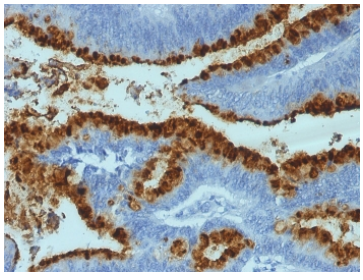
Lewis b Antibody / Lewis Blood Group Antibody [clone 2-25LE, also called LWB01] (V3146)

Catalog No.	Formulation	Size
V3146-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3146-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3146SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V3146IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	2-25LE, also called LWB01
Purity	Protein G affinity chromatography
UniProt	P21217
Localization	Cytoplasmic
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This Lewis b Antibody / Lewis Blood Group Antibody is available for research use only.



Lewis b Antibody Colon Carcinoma IHC. Immunohistochemistry analysis of FFPE human colon carcinoma tissue stained with Lewis b Antibody demonstrates strong membranous and apical HRP-DAB brown staining throughout glandular epithelial tumor cell populations, consistent with expression of Lewis b-associated carbohydrate antigens within gastrointestinal-derived carcinoma tissue. This Lewis blood group antibody, clone 2-25LE also known as LWB01, highlights epithelial glycoconjugate organization and tumor-associated glycosylation pathways associated with gastrointestinal epithelial differentiation and mucin-related cellular signaling.

Description

Lewis b is a fucosylated carbohydrate antigen belonging to the Lewis blood group system, a family of glycan structures involved in epithelial differentiation, mucosal glycobiology, cell-cell adhesion, and carbohydrate-mediated signaling pathways. Lewis blood group antigens are generated through coordinated glycosyltransferase activity and are prominently expressed on gastrointestinal epithelial surfaces and secreted mucins. Lewis b Antibody is useful for investigations involving epithelial glycobiology, gastrointestinal differentiation, mucin-associated carbohydrate signaling, and tumor-associated glycosylation pathways.

Lewis b antibody, also referred to as Le(b) antibody, Lewis blood group antibody, and CD174 antibody in the literature, recognizes a terminal fucosylated carbohydrate epitope associated with gastrointestinal epithelial tissues and subsets of epithelial-derived tumors. Lewis antigen expression patterns are regulated through activity of fucosyltransferases including FUT2 and FUT3, which contribute to biosynthesis of Lewis-associated carbohydrate structures involved in epithelial surface organization and secretory mucin biology.

Lewis b Antibody / Lewis Blood Group Antibody (clone 2-25LE/LWB01) is uniquely positioned for studies involving gastrointestinal epithelial differentiation and tumor-associated carbohydrate antigen expression. This mouse monoclonal antibody has been referenced in published investigations involving epithelial glycobiology and carbohydrate-associated tissue characterization. Clone 2-25LE/LWB01 supports immunohistochemical detection of Lewis b-associated carbohydrate structures within gastrointestinal epithelial and colon carcinoma-associated tissue compartments.

Lewis blood group antigens contribute to diverse biologic processes including epithelial barrier organization, microbial interaction, mucosal signaling, and selectin-associated cellular adhesion pathways. Altered expression of Lewis-associated carbohydrate structures has been associated with gastrointestinal tumor progression, epithelial differentiation status, inflammatory signaling, and mucin-associated neoplastic transformation. Because Lewis antigens are prominently expressed on epithelial glycoconjugates and secretory mucins, they serve as useful markers for studies involving gastrointestinal epithelial biology and carbohydrate-associated tumor differentiation.

In tissue-based detection systems, Lewis b expression is commonly observed along epithelial cell membranes, apical glandular surfaces, and mucin-associated secretory compartments within gastrointestinal tissues. Colon carcinoma and gastrointestinal epithelial neoplasms may demonstrate altered distribution or intensity of Lewis-associated carbohydrate antigens reflecting changes in glycosylation pathways during tumor progression and epithelial remodeling. Clone 2-25LE/LWB01 therefore supports investigations involving gastrointestinal glycobiology, epithelial carbohydrate antigen organization, and tumor-associated glycosylation patterns.

This Lewis b Antibody supports research involving epithelial glycobiology, gastrointestinal differentiation pathways, carbohydrate antigen biology, mucin-associated signaling, selectin-associated adhesion mechanisms, and tumor-associated glycosylation regulation. Clone 2-25LE/LWB01 may be incorporated into immunohistochemistry and tissue-based investigations examining Lewis blood group-associated epithelial differentiation and carbohydrate-mediated cellular organization in normal and diseased tissues.

For additional gastrointestinal differentiation and epithelial glycobiology markers, explore our Cancer Antibodies page featuring antibodies targeting mucin-associated signaling and tumor-associated carbohydrate antigen pathways.

Application Notes

The optimal dilution of the Lewis b Antibody / Lewis Blood Group Antibody for each application should be determined by the researcher.

1. Staining of formalin-fixed tissues is enhanced by boiling tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 minutes.

2. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

Mucin isolated from human ovarian cyst fluid was used as the immunogen for this Lewis b antibody.

Storage

Store the Lewis b antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

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