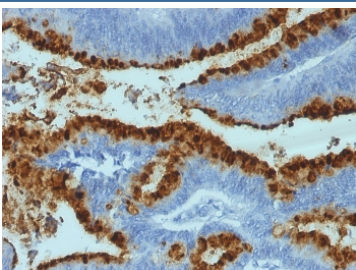


## Lewis b Antibody / Lewis Blood Group Antibody [clone 2-25LE, also called LWB01] (V3146)

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

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