abcam

ab3968

Anti-Blood Group Lewis b antibody [2-25LE]

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	pH: 7.4 Preservative: 0.097% Sodium azide Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	Native Full Length Protein corresponding to Human MUC5AC. Database link P98088
Clone number	2-25LE
Purification technique	Affinity purification Protein A
Light chain type	unknown
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	Purified from hybridoma culture supernatant. Purity >95% by SDS-PAGE.

Reactivity data

Flow Cyt

Expected

Species	Human
Dilution info	-

Notes	ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

ELISA

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

WB

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

IHC-P

Tested

Species	Human
Dilution info	5-10 µg/mL
Notes	-

ICC/IF

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Target data

See full target information MUC5AC

Function	Gel-forming glycoprotein of gastric and respiratory tract epithelia that protects the mucosa from infection and chemical damage by binding to inhaled microorganisms and particles that are subsequently removed by the mucociliary system (PubMed:14535999, PubMed:14718370). Interacts with H.pylori in the gastric epithelium, Barrett's esophagus as well as in gastric metaplasia of the duodenum (GMD) (PubMed:14535999).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	The Blood Group Lewis b also known as Le(b) is a carbohydrate antigen involved in the Lewis blood group system. Le(b) is formed by the addition of fucose to subterminal N-acetylglucosamine and galactose residues on type 1 precursor chains resulting in its mechanical function as a cell surface glycolipid. This antigen is about 650 Da in mass. Le(b) expresses predominantly on epithelial cells and secreted into body fluids by secretory glands including the stomach and the lungs.
Biological function summary	The Blood Group Lewis b plays a significant role in cell recognition and adhesion processes. It participates in immune response modulation by interacting with specific immune cells. Le(b) is not part of a major protein complex but interacts with other antigens to form distinct blood group phenotypes. The presence of Le(b) on cell surfaces can influence cellular interactions and immune recognition.
Pathways	Blood Group Lewis b plays a role in the fucosylation pathways which is a part of the larger glycosylation pathway. This influences cell-cell communication and signal transduction. The fucosylation of the Lewis antigens such as Le(b) is mediated by enzymes like fucosyltransferases which are important for the synthesis of these antigens. The relationship between Le(b) and other proteins in these pathways highlights its importance in maintaining cellular functions.

Associated diseases and disorders	The presence and expression of Blood Group Lewis b antigen can impact conditions such as Helicobacter pylori infection and gastric cancer. The Le(b) antigen serves as a receptor for H. pylori facilitating bacterial adhesion to the gastric epithelium which may increase susceptibility to infection and subsequent disease progression. Proteins like fucosyltransferase involved in Le(b) biosynthesis may also be connected to altered expression patterns observed in gastric-related conditions.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

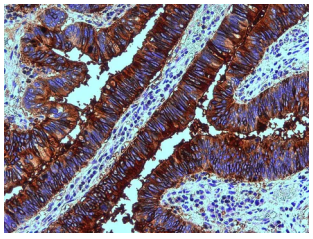
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

1 product image



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Blood Group Lewis b antibody [2-25LE] (ab3968)

Blood Group Lewis b Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-Blood Group Lewis b antibody

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human colon adenocarcinoma tissue labelling Blood Group Lewis b with ab3968 at 10 µg/mL.

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