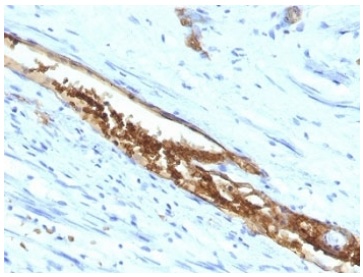
ABO Antibody / A and H Type 3/4 Chain Antibody [clone 3-3A] (V2554)

Catalog No.	Formulation	Size
V2554-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2554-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2554SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2554IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

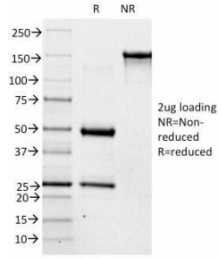
Citations (3)

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	3-3A
Purity	Protein G affinity chromatography
UniProt	P16442
Localization	Cell surface
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This ABO Antibody / A and H Type 3/4 Chain Antibody is available for research use only.



ABO Antibody Colon Carcinoma IHC. Immunohistochemistry staining of FFPE human colon carcinoma tissue using ABO Antibody demonstrates distinct membranous and apical HRP-DAB brown staining within gland-forming epithelial tumor cells. The staining pattern is consistent with expression of A and H type 3/4 chain carbohydrate antigens, specialized glycan structures associated with selected ABO blood group determinants. Clone 3-3A highlights epithelial cell populations expressing type 3 and type 4 chain-associated carbohydrate epitopes and supports the utility of this antibody for studies of blood group antigen distribution, glycobiology, and tissue-specific glycosylation patterns. The observed staining is consistent with expression of ABO-associated carbohydrate structures on epithelial-derived tumor tissues.



SDS-PAGE Analysis of Purified, BSA-Free ABO Antibody (clone 3-3A). Confirmation of Integrity and Purity of the Antibody.

Description

This ABO Antibody / A and H Type 3/4 Chain Antibody preferably reacts with determinants of chain A and H type 3 (Gal1-3GalNAc-R) and 4 (Gal1-3GalNAc-R), but not with type 1 and 2 chain structures. It is not reactive with immuno-dominant A trisaccharide. This mAb is applicable for tissue staining in tumor patients with blood groups A and AB. It shows a highly heterogeneous reactivity in human colon tumor tissue and adjacent mucosa. Blood-group antigens are generally defined as molecules formed by sequential addition of saccharides to the carbohydrate side chains of lipids and proteins detected on erythrocytes and certain epithelial cells. The A, B and H antigens are reported to undergo modulation during malignant cellular transformation. Blood group related antigens represent a group of carbohydrate determinants carried on both glycolipids and glycoproteins. They are usually mucin-type, and are detected on erythrocytes, certain epithelial cells, and in secretions of certain individuals. Sixteen genetically and biosynthetically distinct but inter-related specificities belong to this group of antigens, including A, B, H, Lewis A, Lewis B, Lewis X, Lewis Y, and precursor type 1 chain antigens.

Researchers seeking additional information on ABO Antigen A expression and blood group carbohydrate biology may also be interested in our Blood Group Antigen A Antibody page featuring the published HE-193 clone and extensive characterization of A antigen epitopes.

Application Notes

Optimal dilution of the ABO Antibody / A and H Type 3/4 Chain Antibody should be determined by the researcher.

1. Staining of formalin-fixed tissues requires boiling tissue sections in 10mM Citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 min
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 an ovarian cyst fluid was used as the immunogen for the ABO antibody.

Storage

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

Alternate Names

Blood Group Antigen A antibody, H Antigen antibody, ABO Carbohydrate Antibody, Blood Group Glycan Antibody, A Chain Antibody