ABO Antibody / Blood Group Antigen A [clone HE-14] (V2549)

Catalog No.	Formulation	Size
V2549-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2549-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2549SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgM, kappa
Clone Name	HE-14
Purity	PEG precipitation
UniProt	P16442
Localization	Cell surface
Applications	Immunohistology (formalin-fixed) : 1-2ug/ml Immunofluorescence : 2-4ug/ml
Limitations	This ABO / Blood Group Antigen A antibody is available for research use only.

Description

This Blood Group Antigen A antibody recognizes human blood group A (monofucosyl and difucosyl A antigens with chain types 1, 2, 3, 4, 5, 6) and Forssmann antigen. It is also reactive with the immuno-dominant A trisaccharide. Blood group antigen expression in human colon cancer was studied by means of two monoclonal antibodies of broad anti-A (HE-14) and anti-type 3 and type 4 chain-based A and H (HE-10) specificity. These antigens were proved to re-appear in tumors of the distal colon, the HE-10 antibody reacting more frequently (9 out of 12 samples) than HE-14 (5 out of 12 samples) and frequently with supra-nuclear staining of the cytoplasm probably in those places of the Golgi apparatus where carbohydrate antigens are synthesized. This staining pattern is characteristic of HE-10 in normal colonic mucosa as well. With HE-14, staining was often absent in less differentiated tumors, while HE-10 did react in such tumors. In some cases, these two antibodies gave different staining patterns in parallel sections from the same tissue sample, primarily at the cellular level. Three out of 12 cases showed blood group antigen expression in the mucosa of the distal colon adjacent to the tumor only when HE-10 mAb was used.

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 / Blood Group Antigen A 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 minutes

Immunogen

A mixture of erythrocytes of blood group A1 and glycoprotein fraction isolated from the saliva of secretors with blood group A was used as the immunogen for the ABO / Blood Group Antigen A antibody.

Storage

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