

Mouse anti-Human Blood Group Antigen A Monoclonal Antibody | anti-ABO antibody

Blood Group Antigen A (CD173) Mouse Monoclonal Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA62885	Mouse	Human	Immunohistochemistry, Immunofluorescence

PRODUCT SYNONYMS

Blood Group Antigen A; Monoclonal Antibody; Blood Group Antigen A (CD173) Mouse Monoclonal Antibody; A transferase; ABO; B transferase; CD173; Fucosylglycoprotein 3-alpha-galactosyltransferase; Fucosylglycoprotein alpha-N-acetylgalactosaminyltransferase; Glycoprotein-fucosylgalactoside alpha-galactosyltransferase; Glycoprotein-fucosylgalactoside alpha-N-acetylgalactosaminyltransferase; Histo-blood group A transferase; Histo-blood group B transferase; NAGAT; anti-ABO antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human
Clonality	Monoclonal
Isotype	IgM, kappa
Clone Number	HE-14
Specificity	This 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 Ab was used.
Form/Format	200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Sequence Length	354
Applicable Applications for anti-ABO antibody	IHC (Immunohistochemistry), IF (Immunofluorescence), Agglutination
Cellular Localization	Cell Surface
Immunogen	Mixture of erythrocytes of blood group A1 and glycoprotein fraction isolated from the saliva of secretors with blood group A
Mol. Weight of Antigen	Multiple
Hu-Chromosome Location	9q34.2
Positive Control	KG1 cells or human colorectal carcinoma tissues.
Preparation and Storage	Antibody with azide - store at 2 to 8 degree C. Antibody without azide - store at -20 to -80 degree C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

ADDITIONAL INFORMATION

References	Van-k J, Dr-malov- D, Smyslov- O, Nmec M, Viklick- V, Wisniewski K. Detection of blood group A antigen expression in human colon cancer using monoclonal antibodies with different specificities. Neoplasma. 1989;36(4):479-88
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NCBI AND UNIPROT INFORMATION

NCBI GI #	58331216
NCBI GeneID	28
NCBI Accession #	NP_065202.2
NCBI GenBank Nucleotide #	NM_020469.2
UniProt Accession #	P16442; O14758; Q14490; Q53I57; Q6ISD4; Q6KFZ2; Q70V27; Q99484; Q99485; Q9NY01; Q9UQ68; B0JDB9
Molecular Weight	40,934 Da
NCBI Official Full Name	histo-blood group ABO system transferase
NCBI Official Synonym Full Names	ABO blood group (transferase A, alpha 1-3-N-acetylgalactosaminyltransferase; transferase B, alpha 1-3-galactosyltransferase)
NCBI Official Symbol	ABO
NCBI Official Synonym Symbols	GTB; NAGAT; A3GALNT; A3GALT1
NCBI Protein Information	histo-blood group ABO system transferase
UniProt Protein Name	Histo-blood group ABO system transferase
UniProt Gene Name	ABO
UniProt Synonym Gene Names	A transferase; B transferase
UniProt Entry Name	BGAT_HUMAN

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