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Blood Group Antigen A (CD173) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone HE-14]
Catalog # AH11350

Product Information

Application	IHC, IF
Primary Accession	P16442
Other Accession	28, 654423
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgM, kappa
Clone Names	HE-14
Calculated MW	40934

Additional Information

Gene ID	28
Other Names	Histo-blood group ABO system transferase, Fucosylglycoprotein 3-alpha-galactosyltransferase, Fucosylglycoprotein alpha-N-acetylgalactosaminyltransferase, Glycoprotein-fucosylgalactoside alpha-N-acetylgalactosaminyltransferase, 2.4.1.40, Glycoprotein-fucosylgalactoside alpha-galactosyltransferase, 2.4.1.37, Histo-blood group A transferase, A transferase, Histo-blood group B transferase, B transferase, NAGAT, Fucosylglycoprotein alpha-N-acetylgalactosaminyltransferase soluble form, ABO
Application Note	IHC~~1:100~500 IF~~1:50~200
Storage	Store at 2 to 8°C.Antibody is stable for 24 months.
Precautions	Blood Group Antigen A (CD173) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ABO
Function	This protein is the basis of the ABO blood group system. The histo-blood group ABO involves three carbohydrate antigens: A, B, and H. A, B, and AB individuals express a glycosyltransferase activity that converts the H antigen to the A antigen (by addition of UDP-GalNAc) or to the B antigen (by addition of UDP-Gal), whereas O individuals lack such activity.

Cellular Location	Golgi apparatus, Golgi stack membrane; Single- pass type II membrane protein. Secreted Note=Membrane-bound form in trans cisternae of Golgi. Secreted into the body fluid
Tissue Location	Expressed at high levels in testis. Also expressed in pancreas, uterus and lung and salivary gland

Background

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.

References

Van k J, Dr malov D, Smyslov O, N mec 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