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

Mouse Monoclonal Antibody [Clone HE-10]
Catalog # AH11359

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-10
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 N-acetyl-alpha- D-galactosamine (GalNAc)) or to the B antigen (by addition of galactose (Gal)), whereas O individuals lack such activity and express the H antigen precursor unmodified.

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 MAb 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.

References

Nemec M et al. Murine monoclonal antibodies to human A erythrocytes: differential reactivity with N-acetyl-D-galactosamine. Vox Sang 52:125-8 (1987). | J. Va k et al. (1989) Detection of blood group A antigen expression in human colon cancer using monoclonal antibodies with different specificities. Neoplasma, 36: 479-487

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