

Mouse Anti-Blood Group Antigen A [3-3A]: MC0002

Intended Use: For Research Use Only

Description: This antibody preferably reacts with determinants of chain A and H type 3 \bar{A} (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 antibody 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.

Specifications:

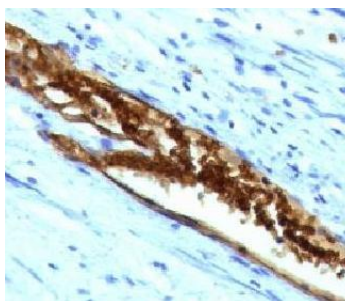
Clone: 3-3A
Source: Mouse
Isotype: IgG1k
Reactivity: Human
Immunogen: Mucin isolated from an ovarian cyst fluid
Localization: Membrane
Formulation: Purified antibody in PBS pH7.4, containing BSA and \leq 0.09% sodium azide (NaN₃)
Storage: Store at 2°- 8°C
Applications: IHC
Package:

Description	Catalog No.	Size
Blood Group Antigen A Concentrated	MC0002	1 ml

IHC Procedure*:

Positive Control Tissue: Colorectal carcinoma, KG1 cells
Concentrated Dilution: 50-200
Pretreatment: Tris EDTA pH9.0, 15 minutes Pressure Cooker or 30-60 minutes water bath at 95°-99°C
Incubation Time and Temp: 30-60 minutes @ RT
Detection: Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.



FFPE human colon carcinoma stained with anti-Blood Group Antigen A using DAB

References:

1. Association between the ABO blood group and primary knee osteoarthritis: A case-control study. Li C, et al. J Orthop Translat 21:129-135, 2020.
2. Characterization of moose intestinal glycosphingolipids. Johansson MM, et al. Glycoconj J 32:393-412, 2015.
3. Murine monoclonal antibodies to human A erythrocytes: differential reactivity with N-acetyl-D-galactosamine. Nemeč M, et al. Vox Sang 52:125-8, 1987.

Doc. 100-MC0002
Rev. A