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Blood Group A Monoclonal Mouse Antibody (3-3A)

Product Description

This antibody is applicable for staining ABO blood groups A and AB. The histo-blood group ABO involves three carbohydrate antigens: A, B, and H. 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. 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. This antibody preferentially 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. It shows a highly heterogeneous reactivity in human colon tumor tissue and adjacent mucosa. The A, B and H antigens are reported to undergo modulation during malignant cellular transformation.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the [CF® Dye Brochure](#) for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

Stock status: Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email order@biotium.com to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 1251, Anti-Blood Group A (3-3A) Catalog number key for antibody number 1251, Anti-Blood Group A (3-3A)

Product attributes

Antibody number	#1251
Antibody reactivity (target)	Blood Group A
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	3-3A
Isotype	IgG1, kappa
Molecular weight	Multiple
Synonyms	ABO Type A; Blood Group A
Human gene symbol	ABO
Entrez gene ID	28
SwissProt	P16442
Unigene	654423
Immunogen	Mucin isolated from an ovarian cyst fluid
Antibody target cellular localization	Plasma membrane
Verified antibody applications	IHC (FFPE) (verified)
Species reactivity	Human
Antibody application notes	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunohistochemistry (formalin-fixed): 1-2 ug/mL for 30 minutes at RT, Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 minutes followed by cooling at RT for 20 minutes, Optimal dilution for a specific application should be determined by user
Positive control	KG1 cells. Human colorectal carcinoma tissues.
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C
Regulatory status	For research use only (RUO)
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Product origin	Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot.
Antibody research areas	Cancer, Hematology

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	CF®405S Features
BNC88	CF®488A	490/515	488	GFP, FITC	CF®488A Features
BNC68	CF®568	562/583	532, 561	RFP, TRITC	CF®568 Features
BNC94	CF®594	593/614	561	Texas Red®	CF®594 Features
BNC40	CF®640R	642/662	633-640	Cy®5	CF®640R Features
BNC47	CF®647	650/665	633-640	Cy®5	CF®647 Features
BNC74	CF®740	742/767	633-685	775/50	CF®740 Features
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	

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This datasheet was generated on August 24, 2025 at 01:58:45 AM. Visit product page to check for updated information before use.
Product link: <https://biotium.com/product/blood-group-a-cd173-monoclonal-mouse-antibody-3-3a/>