

Thomsen-Friedenreich Antigen / CD176 Monoclonal Mouse Antibody (A78-G/A7)

Product Description

This antibody recognizes a disaccharide epitope, Gal 1-3GalNAc, of Thomsen-Friedenreich (TF) antigen. It is specific for both anomeric forms of the disaccharide (TF and TF, including related structures on the glycolipid) and shows no cross-reactivity with sialylated glycophorin. The Thomsen-Friedenreich antigen acts as an oncofetal antigen, with low expression in normal adult tissues but increasing to fetal levels of expression in hyperplasia or malignancy. It is considered as a pan-carcinoma marker. This MAb is capable to agglutinate desialylated red blood cells. During metastasis, the ability of malignant cells to form multicellular aggregates via homotypic or heterotypic aggregation and their adhesion to the endothelium are critical. The tumor-associated carbohydrate Thomsen-Friedenreich antigen (Gal-GalNAc) is involved in tumor cell adhesion and tissue invasion. It also causes an immune response, and overexpression of the antigen causes cancer cells to be more sensitive to natural killer cell lysis. The Thomsen-Friedenreich antigen is suppressed in normal healthy cells and represents one of the few chemically well-defined antigens associated with tumor malignancy. The presence of the Thomsen-Friedenreich antigen on the surface of cancer cells may result from a divergence from the normal pathway for O-linked glycosylation in these cells, most likely caused by inappropriate localization of the enzymes involved in synthesis of the disaccharide.

This antibody is available purified, with BSA and azide (0.2 mg/mL) or purified, BSA-free and azide-free (1 mg/mL). Catalog number key for antibody number 0936, Anti-CD176|Thomsen-Friedenreich Antigen (A78-G/A7)

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Antibody research areas

Call us: 800-304-5357

#0936			
CD176, Thomsen-Friedenreich Antigen			
Primary			
Mouse			
Monoclonal			
A78-G/A7			
IgM, kappa			
Multiple			
F Antigen; TF Antigen; Asialoglycophorin; pan-carcinoma arker; CD176			
Not Applicable			
Neuraminidase-treated human red blood cells			
IHC (FFPE) (verified)			
Plasma membrane			
Human, Mouse, Rat			
Immunohistochemistry (formalin-fixed): 0.5-1.0 ug/mL for 30 minutes at RT, Immunofluorescence: 0.5-1 ug/mL, 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			
KG1 cells. Human colorectal carcinoma tissues.			
Room temperature			
Store at 2 to 8 $^{\circ}$ C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 $^{\circ}$ C			
For research use only (RUO)			
dy/conjugate 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/r in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/ml PBS without azide			
Guaranteed for at least 24 months from date of receipt when stored as recommended			
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 # 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,	N/A	N/A	N/A	

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