

# CD31 / PECAM-1 Monoclonal Mouse Antibody (JC/70A)



## **Product Description**

CD31 (PECAM-1) is a transmembrane glycoprotein member of the immunoglobulin supergene family of adhesion molecules. CD31 is expressed by stem cells of the hematopoietic system and is primarily used to identify and concentrate these cells for experimental studies as well as for bone marrow transplantation. Anti-CD31 has shown to be highly specific and sensitive for vascular endothelial cells. Staining of nonvascular tumors (excluding hematopoietic neoplasms) is rare. CD31 MAb reacts with normal, benign, and malignant endothelial cells which make up blood vessel lining. The level of CD31 expression can help to determine the degree of tumor angiogenesis, and a high level of CD31 expression may imply a rapidly growing tumor and potentially a predictor of tumor recurrence.

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 <u>CF® Dye Brochure</u> 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 <u>order@biotium.com</u> to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 0639, Anti-CD31 (JC/70A)

### Call us : <u>800-304-5357</u> E

#### Email: techsupport@biotium.com

### Product attributes

FIGURE AUDULES				
Antibody number	#0639			
Antibody reactivity (target)	CD31, PECAM-1			
Antibody type	Primary			
Host species	Mouse			
Clonality	Monoclonal			
Clone	JC/70A			
Isotype	lgG1, kappa			
Molecular weight	~100 kDa (endothelium) and ~130 kDa (platelets)			
Synonyms	EndoCAM; PECA1; Platelet Endothelial Cell Adhesion Molecul 1; GPIIA'			
Human gene symbol	PECAM1			
Entrez gene ID	5175			
SwissProt	P16284			
Unigene	376675 & 514412			
Immunogen	Membrane preparation of a spleen from a patient with hairy cell leukemia			
Verified antibody applications	Flow (verified), IHC (FFPE) (verified), WB (verified)			
Antibody target cellular localization	Plasma membrane			
Species reactivity	Cynomolgus monkey, Human, Rabbit			
Antibody application notes	Immunohistology formalin-fixed 1-2 ug/mL, Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM Tris with 1 mM EDTA, pH 9.0, for 10-20 min followed by cooling at RT for 20 minutes, Immunofluorescence 0.5-1 ug/mL, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Western blotting 0.5-1.0 ug/mL, Does not react with rat or pig: others not known, Optimal dilution for a specific application should be determined by user			
Positive control	Jurkat cells. Tonsil or Angiosarcoma.			
Shipping condition	Room temperature			
Storage Conditions	Store at 2 to 8 $^\circ\text{C},$ Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 $^\circ\text{C}$			
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended			
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 i PBS without azide			
Antibody research areas	Angiogenesis, Cancer			
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.			
Cell/tissue expression Endothelial cells				

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	

Alexa Fluor, Pacific Blue, Pacific Orange, and Texas Red are trademarks or registered trademarks of Thermo Fisher Scientific; Cy is a registered trademark of Cytiva; IRDye, LI-COR, and Odyssey are registered trademarks of LI-COR Bioscience.

This datasheet was generated on August 28, 2025 at 04:22:16 PM. Visit product page to check for updated information before use. Product link: <u>https://biotium.com/product/monoclonal-anti-cd31-pecam-1-jc70a/</u>