

# CD31 / PECAM-1 Monoclonal Mouse Antibody (JC70/A + C31.3)

## 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 [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](mailto:order@biotium.com) to inquire about stock status and lead times before placing your order.

**Catalog number key for antibody number 0647, Anti-CD31 (JC70/A C31.3)**

## Product attributes

<b>Antibody number</b>	#0647
<b>Antibody reactivity (target)</b>	CD31, PECAM-1
<b>Antibody type</b>	Primary
<b>Host species</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Clone</b>	JC70/A + C31.3
<b>Isotype</b>	IgG's
<b>Molecular weight</b>	~100 kDa (endothelium) and ~130 kDa (platelets)
<b>Synonyms</b>	EndoCAM; PECA1; Platelet Endothelial Cell Adhesion Molecule 1; GPIIA
<b>Human gene symbol</b>	PECAM1
<b>Entrez gene ID</b>	5175
<b>SwissProt</b>	P16284
<b>Unigene</b>	376675 & 514412
<b>Immunogen</b>	Human recombinant CD31 protein (C31.3) & Membrane preparation of a spleen from a patient with hairy cell leukemia (JC/70A)
<b>Verified antibody applications</b>	IHC (FFPE) (verified), WB (verified)
<b>Antibody target cellular localization</b>	Plasma membrane
<b>Species reactivity</b>	Cynomolgus monkey, Human, Rabbit
<b>Antibody application notes</b>	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, Optimal dilution for a specific application should be determined by user
<b>Positive control</b>	Jurkat cells. Tonsil or Angiosarcoma.
<b>Shipping condition</b>	Room temperature
<b>Storage Conditions</b>	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C
<b>Shelf life</b>	Guaranteed for at least 24 months from date of receipt when stored as recommended
<b>Regulatory status</b>	For research use only (RUO)
<b>Antibody/conjugate formulation</b>	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
<b>Antibody research areas</b>	Angiogenesis, Cancer
<b>Product origin</b>	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.
<b>Cell/tissue expression</b>	Endothelial cells

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