

CD31 / PECAM-1 Monoclonal Mouse Antibody (1A10)

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.

Product attributes

Antibody number	#0846
Antibody reactivity (target)	CD31, PECAM-1
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	1A10
Isotype	IgG1, kappa
Molecular weight	~100 kDa (endothelium); ~130 kDa (platelets)
Synonyms	EndoCAM; PECA1; Platelet Endothelial Cell Adhesion Molecule 1; GPIIA'
Human gene symbol	PECAM1
Entrez gene ID	5175
SwissProt	P16284
Unigene	376675 & 514412
Immunogen	Prokaryotic recombinant fusion protein corresponding to a portion of the extracellular domain downstream of the signal sequence of the CD31 (PECAM-1)
Antibody target cellular localization	Plasma membrane
Species reactivity	Human
Antibody application notes	For coating for ELISA, order Ab without BSA. Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody. Optimal dilution and staining procedure for a specific application should be determined by user. Recommended starting concentrations for titration are 1-2 ug/mL for most applications, or 1 ug/million cells/100 uL for flow cytometry
Positive control	THP-1, Jurkat cells. Tonsil or Angiosarcoma.
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
Cell/tissue expression	Endothelial cells
Antibody research areas	Angiogenesis, Cancer