

Monoclonal Antibody to CD31 / PECAM1 - Purified

Alternate names:	EndoCAM, GPIIA', PECAM-1, Platelet endothelial cell adhesion molecule
Catalog No.:	SM272P
Quantity:	0.25 mg
Concentration:	1.0 mg/ml
Background:	<p>CD31, also known as platelet endothelial cell adhesion molecule 1 (PECAM1), is a type I integral membrane glycoprotein and a member of the immunoglobulin superfamily of cell surface receptors. It is constitutively expressed on the surface of endothelial cells, and concentrated at the junction between them. It is also weakly expressed on many peripheral lymphoid cells and platelets.</p> <p>CD31 has been used to measure angiogenesis in association with tumor recurrence. Other studies have also indicated that CD31 and CD34 can be used as markers for myeloid progenitor cells and recognize different subsets of myeloid leukemia infiltrates (granular sarcomas).</p> <p>CD31 is a type 1 transmembrane protein expressed primarily on endothelial cells, platelets and leucocytes.</p>
Uniprot ID:	Q3SWT0
NCBI:	NP_113779.1
GeneID:	29583
Host / Isotype:	Mouse / IgG1
Clone:	TLD-3A12
Immunogen:	Activated, Lewis rat derived microglial cells. Spleen cells from immunised BALB/c mouse were fused with cells of the mouse SP2 myeloma cell line.
Format:	State: Liquid purified IgG fraction Purification: Affinity Chromatography on Protein G Buffer System: PBS, pH 7.4 containing 0.09% Sodium Azide as preservative
Applications:	ELISA. Western blot. Flow Cytometry: Use 10 µl of 1/10-1/100. diluted antibody to label 10e6 cells in 100 µl. Immunohistochemistry on Frozen Sections: 1/10-1/100. Not Suitable for Paraffin Sections. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This antibody recognizes PECAM-1 (CD31). Clone TLD-3A12 has been shown to partially block the proliferative response of antigen-specific CD4+ T cells to antigen-presenting cells and relevant antigen (3). SM272LE is recommended for use in Functional Studies.

For research and in vitro use only. Not for diagnostic or therapeutic work.

Material Safety Datasheets are available at www.acris-antibodies.com or on request.

Antibody Hotline - Technical Questions - Antibody Location Service
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Species Reactivity: **Tested:** Rat. Does not react with Human.

Storage: Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.
Avoid repeated freezing and thawing.
Shelf life: one year from despatch.

General References: 1. Flaris, N.A. et al. (1993) Characterisation of microglia and macrophages in the central nervous system of the rat. *GLIA* 7: 34-40.
2. Male, D. et al. (1995) An interferon inducible molecule on brain endothelium which controls lymphocyte adhesion mediated by integrins. *Immunology* 84: 453-460.
3. Williams, K.C. et al. (1996) PECAM-1 (CD31) expression in the central nervous system and its role in experimental allergic encephalomyelitis in the rat. *J. Neurosci. Res.* 45(6):747-57.
4. Stevenson, K.S. et al. (2009) Isolation, characterization, and differentiation of thy1.1-sorted pancreatic adult progenitor cell populations. *Stem Cells Dev.* 18: 1389-98.

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