

Monoclonal Antibody to CD31

Cat. #: Mab-607073

Description:

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. The antibody reacts with the murine form of the Platelet-Endothelial Cell Adhesion Molecule. The reactivity of the antibody is restricted to the isoform of the molecule that is selectively expressed by endothelial cells. The antigen is predominantly present at the lateral borders of endothelial cells as described for human PECAM-1. It is also weakly expressed on many peripheral lymphoid cells and platelets. 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).

Immunogen/Specificity:

Ni-NTA purified recombinant CD31 expressed in E. Coli strain BL21 (DE3)

Applications :

Western Blot: 1: 500- 1: 2,000

IHC(P): 1: 500- 1: 2,000

ELISA: Propose dilution 1: 10,000.

Determining optimal working dilutions by titration test.

Formulation

Antibodies are purified by protein A affinity chromatography

Reference:

1. Mayr U et al. Circ Res 98:412-20 (2006).

2. Bingle L et al. Br J Cancer 94:101-7 (2006).

3. Wynne F et al. Reproduction 131:721-32 (2006).

Clone Number: 2F7B2

Isotype: IgG1

Species: Human

Storage and Stability: stored at -20 C

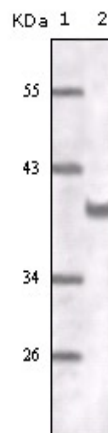
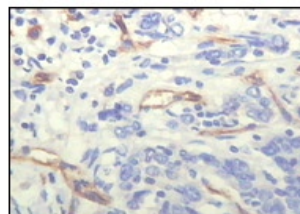
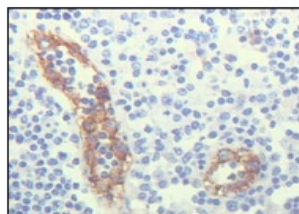


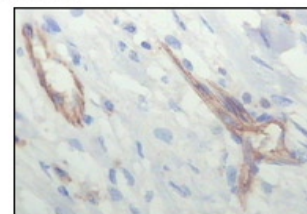
Figure 1: Western blot analysis using anti- human CD31 monoclonal antibody against CD31 recombinant protein.



Human lung cancer



Human lymphonodus tissue



Human breast cancer

Figure 2: Immunohistochemical analysis of paraffin-embedded human lung cancer, lymphonodus tissue and breast cancer, showing cytoplasmic location of vascular endothelial cells using CD31 antibody with DAB staining