

Human CD31 / PECAM1 Protein (Fc Tag)

Catalog Number: 10148-H02H



Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

CD31; CD31/EndoCAM; endoCAM; GPIIA⁺; PECA1; PECAM-1; C85791; Cd31; Pecam; PECAM-1

Protein Construction:

A DNA sequence encoding the extracellular domain (Met 1-Lys 601) of human CD31 (EAW94208.1) was expressed with the fused Fc region of human IgG1 at the C-terminus.

Source: Human

Expression Host: Human Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE

Bio Activity:

Measured by the ability of the immobilized protein to support the adhesion of Jurkat human acute T cell leukemia cells. When 8×10^4 cells/well are added to sCD31-Fc coated plates (1.25 μ g/mL, 100 μ L/well) in the presence of 20ng/mL PMA, approximately 20-45% will adhere after 30 minutes at 37°C.

Endotoxin:

< 1.0 EU per μ g of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Gln 28

Molecular Mass:

The recombinant human CD31/Fc is a disulfide-linked homodimer. The reduced monomer consists of 812 amino acids and predicts a molecular mass of 91.2 kDa. As a result of glycosylation, the rhCD31/Fc monomer migrates as approximately 130-140 kDa band in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile 100mM Glycine, 10mM NaCl, 50mM Tris, pH 7.5

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

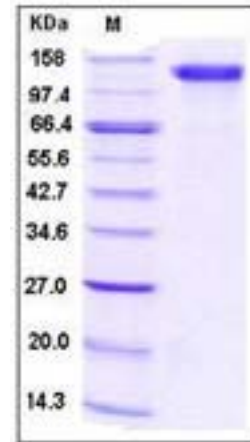
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

The Cluster of Differentiation 31 (CD31) adhesion molecule, also known as platelet-endothelial cell adhesion molecule-1 (PECAM-1), is the only known member of the CAM family on platelets. CD31 protein is a 130-kDa transmembrane glycoprotein expressed by endothelial cells, platelets, monocytes, neutrophils, and certain T cell subsets. CD31 protein is also expressed in certain tumors, including epithelioid hemangioendothelioma, other vascular tumors, and histiocytic malignancies. CD31 plays a key role in removing aged neutrophils and tissue regeneration. CD31 protein mediates the homotypic or heterotypic cell adhesion by binding to itself or the leukocyte integrin α v β 3, and thus plays a role in neutrophil recruitment in inflammatory responses, transendothelial migration of leukocytes, as well as in cardiovascular development.

References

1. Deaglio S, et al. (2000) CD38/CD31, a receptor/ligand system ruling adhesion and signaling in human leukocytes. Chem Immunol. 75: 99-120.
2. Kohler S, et al. (2009) Life after the thymus: CD31+ and CD31- human naive CD4+ T-cell subsets. Blood. 113(4): 769-74.

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