

## Synonym

PECAM1,CD31,FLJ34100,FLJ58394

#### Source

Human CD31, His Tag(CD1-H5224) is expressed from human 293 cells (HEK293). It contains AA Gln 28 - Lys 601 (Accession # P16284-1). Predicted N-terminus: Gln 28

### **Molecular Characterization**

CD31(Gln 28 - Lys 601) P16284-1

Poly-his

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 66.4 kDa. The protein migrates as 80-100 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

#### **Endotoxin**

Less than 1.0 EU per  $\mu g$  by the LAL method / rFC method.

# **Purity**

>95% as determined by SDS-PAGE.

#### **Formulation**

Lyophilized from  $0.22~\mu m$  filtered solution in 50 mM Tris, 150 mM NaCl, pH7.5 with trehalose as protectant.

Contact us for customized product form or formulation.

#### Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

### Storage

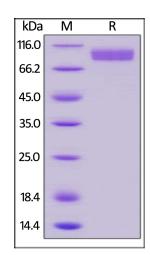
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

### **SDS-PAGE**



Human CD31, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

## **Background**

Cluster of Differentiation 31 (CD31) is also known as Platelet endothelial cell adhesion molecule (PECAM-1), is a 130-kDa transmembrane glycoprotein expressed by endothelial cells, platelets, macrophages and Kupffer cells, granulocytes, T / NK cells, lymphocytes, megakaryocytes, osteoclasts, neutrophils, certain tumors, and is the only known member of the CAM family on platelets. CD31 is found on the surface of platelets, monocytes, neutrophils, and some types of T-cells, and makes up a large portion of endothelial cell intercellular junctions. The encoded protein is a member of the immunoglobulin superfamily and is likely involved in leukocyte



# **Human CD31 / PECAM-1 Protein, His Tag**

Catalog # CD1-H5224



migration, angiogenesis, and integrin activation. CD31 plays a key role in removing aged neutrophils from the body. CD31 mediates the homotypic or heterotypic cell adhesion by binding to itself or the leukocyte integrin  $\alpha\nu\beta3$ , and thus plays a role in neutrophil recruitment in inflammatory responses, transendothelial migration of leukocytes, as well as in cardiovascular development. In addition, it has been shown that CD31 expression is up-regulated by LPS stimulation, and might function as a feedback negative regulator of LPS inflammatory response in macrophages.

