

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 μg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 μm filtered solution in 50 mM Tris, 150 mM NaCl, pH7.5 . Normally trehalose is added as protectant before lyophilization.

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.

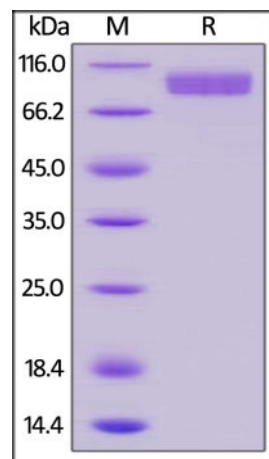
Storage

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 overnight 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 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 $\alpha\text{v}\beta\text{3}$, 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.

References

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.