

Recombinant Protein Technical Manual

Recombinant Human CD31/PECAM1 Protein (His Tag)(Active) RPES0218

Product Data:

Product SKU: RPES0218 **Size:** 100μg

Species: Human Expression host: HEK293 Cells

Uniprot: EAW94208.1

Protein Information:

Molecular Mass: 66 kDa

AP Molecular Mass: 10010 kDa

Tag: C-His

Bio-activity: Measured by the ability of the immobilized protein to support the adhesion of

Jurkat human acute T cell leukemia cells. When 8 x 104 cells/well are added to CD31-His coated plates ($10\mu g/mL$, $100\mu L/well$) in the presence of 20 ng/mL PMA,

approximately 35-45% will adhere after 30 minutes at 37°C.

Purity: > 97 % as determined by reducing SDS-PAGE.

Endotoxin: $< 1.0 \text{ EU per } \mu \text{g}$ as determined by the LAL method.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C.

Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of

reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile PBS, pH 7.4

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Platelet endothelial cell adhesion molecule; PECAM; EndoCAM; GPIIA; PECA1;

CD31; PECAM1

Immunogen Information:

Sequence: Met 1-Lys 601

Background:

The Cluster of Differentiation 31 (CD31) adhesion molecule, also known as platelet-endothelial cell adhesion molecule (PECAM), 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 $\alpha v\beta 3$, and thus plays a role in neutrophil recruitment in inflammatory responses, transendothelial migration of leukocytes, as well as in cardiovascular development.