



Recombinant Protein Technical Manual
Recombinant Mouse CD31/PECAM1 Protein (His
Tag)
RPES0942

Product Data:

Product SKU: RPES0942

Size: 10µg

Species: Mouse

Expression host: Human Cells

Uniprot: Q08481

Protein Information:

Molecular Mass: 63.4 kDa

AP Molecular Mass: 90-95 kDa

Tag: C-His

Bio-activity:

Purity: > 95% as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°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 a 0.2 µm filtered solution of PBS, pH7.4.

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

Application:

Synonyms: Platelet endothelial cell adhesion molecule; PECAM; CD31; Pecam1; Pecam

Immunogen Information:

Sequence: Glu18-Lys590

Background:

Platelet endothelial cell adhesion molecule (PECAM, CD31) is a type I transmembrane glycoprotein adhesion molecule in the immunoglobulin superfamily. PECAM is concentrated at cell junctions and is required for transendothelial migration (TEM). The extracellular domain (ECD) of PECAM has ten potential N-linked glycosylation sites and six C2-type Ig-like domains, the first of which is critical for adhesion and extravasation. The cytoplasmic domain contains immunoregulatory tyrosine-based inhibitory and switch motifs (ITIM, ITSM) that mediate both inhibition and activation via phosphotyrosine-mediated engagement of SH2-containing signaling molecules. Expression is restricted to cells involved in circulation, especially endothelial cells, platelets, monocytes, neutrophils and lymphocyte subsets. PECAM participates with other adhesion molecules in some functions, but is the critical molecule for TEM. Homotypic PECAM adhesion in trans, combined with cycling of PECAM to and from surface-connected endothelial cell vesicles, leads leukocytes across endothelial tight junctions.