

# PECAM-1, Human CellExp™, Human Recombinant

<b>CATALOG #:</b>	7184-10	10 µg
	7184-50	50 µg
<b>ALTERNATE NAMES:</b>	Platelet endothelial cell adhesion molecule, CD31 antigen, EndoCAM	
<b>SOURCE:</b>	HEK 293 cells	
<b>PURITY:</b>	≥ 97% by SDS-PAGE gel and HPLC analyses	
<b>MOL. WEIGHT:</b>	80-95 kDa	
<b>ENDOTOXIN LEVEL:</b>	< 0.1 ng/µg of protein (<1EU/µg).	
<b>FORM:</b>	Lyophilized	
<b>FORMULATION:</b>	Sterile filtered through a 0.2 micron filter. Lyophilized from 10 mM Sodium phosphate, pH 7.5	
<b>STORAGE CONDITIONS:</b>	Store at -20°C. After reconstitution, aliquot and store at -20°C to -80°C. Avoid repeated freezing and thawing cycles.	

**RECONSTITUTION:**

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.

**DESCRIPTION:**

PECAM is transmembrane glycoprotein that belongs to the Ig-related superfamily of adhesion molecules. It is highly expressed at endothelial cell junctions, and also expressed in platelets and in most leukocyte sub-types. The primary function of PECAM-1 is the mediation of leukocyte-endothelial cell adhesion and signal transduction. PECAM-1 has been implicated in the pathogenesis of various inflammation related disorders, including thrombosis, multiple sclerosis (MS), and rheumatoid arthritis. The human

PECAM-1 gene codes for a 738 amino acid transmembrane glycoprotein containing a 118 amino acid cytoplasmic domain, a 19 amino acid transmembrane domain, and a 574 amino acid extracellular domain. Recombinant human PECAM-1 is a 572 amino acid glycoprotein comprising the extracellular domain of PECAM-1. Monomeric glycosylated PECAM-1 migrates at an apparent molecular weight of approximately 80.0-95.0 kDa by SDS-PAGE analysis under reducing conditions.

**AMINO ACID SEQUENCE:**

ENSFTINSVD MKSLPDWTVQ NGKNLTLCQF ADVSTTSHVK PQHQMLFYKD  
DVLFYNISSM KSTESYFIPE VRIYDSGTYK CTVIVNNKEK TTAEYQLLVE  
GVPSRVTLTLD KKEAIQGGIV RVNCSVPEEK APIHFTIEKL ELNEKMKVLLK  
REKNSRDQNF VILEFPVEEQ DRVLSFRCQA RIISGIHMQT SESTKSELVT  
VTESFSTPKF HISPTGMIME GAQLHIKCTI QVTHLAQEFPIIIQKDKAI VAHNRHGNKA  
VYSVMAMVEH SGNYTCKVES SRISKVSSIV VNITELFSKP ELESSFTHLD  
QGERLNLSCS IPGAPPANFT IQKEDTIVSQ TQDFTKIASK SDGTYICTA GIDKVVKKS  
TVQIVVCEML SQPRISYDAQ FEVIKQGTIE VRCESISGTL PISYQLLKTS KVLENSTKNS  
NDPAVFKDNP TEDVEYQCVA DNCHSHAKML SEVLRVKVIA PVDEVQISIL  
SSKVVESGED IVLQCAVNEG SGPITYKFYR EKEGKPFYQM TSNATQAFWT  
KQKASKEQEG EYYCTAFNRA NHASSVPRSK ILTVRVILAP WK

**BIOLOGICAL ACTIVITY:**

Determined by its ability to support the adhesion of activated Jurkat cells. The expected ED<sub>50</sub> for this effect is 1.0 -1.5 µg/ml.

**RELATED PRODUCTS:**

- PDGF-AA, human recombinant (Cat # 4482-10, -50, -1000)
- PDGF-AA, murine recombinant (Cat # 4483-10, -1000)
- PDGF-AB, human recombinant (Cat # 4485-10, -50, -1000)
- PDGF-BB, human recombinant (Cat # 4488-10, -50, -1000)
- PDGF-BB, murine recombinant (Cat # 4489-10, -50, -1000)

**FOR RESEARCH USE ONLY! Not to be used in humans.**