ARG81322
Human CD31 ELISA Kit

Package: 96 wells
Store at: 4°C

Summary

Product Description	ARG81322 Human CD31 ELISA Kit is an Enzyme Immunoassay kit for the quantification of Human CD31 in serum, plasma and cell culture supernatant.
Tested Reactivity	Hu
Tested Application	ELISA
Specificity	Recognizes both natural and recombinant Human soluble CD31. No cross reactivity with other Human adhesion molecules.
Target Name	CD31
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm.
Sensitivity	0.04 ng/ml
Sample Type	Serum, plasma and cell culture supernatants.
Standard Range	0.31 - 10 ng/ml
Sample Volume	100 µl
Alternate Names	EndoCAM; CD31/EndoCAM; PECAM-1; CD31; PECA1; CD antigen CD31; GPIIA'; endoCAM; Platelet endothelial cell adhesion molecule

Application Instructions

Assay Time	~ 3 hours

Properties

Form	96 well
Storage instruction	Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	PECAM1
Gene Full Name	platelet/endothelial cell adhesion molecule 1
Background	CD31 protein 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. [provided by RefSeq, May 2010]
Function	CD31 is a cell adhesion molecule which is required for leukocyte transendothelial migration (TEM)

under most inflammatory conditions (PubMed:19342684, PubMed:17580308). Tyr-690 plays a critical role in TEM and is required for efficient trafficking of PECAM1 to and from the lateral border recycling compartment (LBRC) and is also essential for the LBRC membrane to be targeted around migrating leukocytes (PubMed:19342684). Trans-homophilic interaction may play a role in endothelial cell-cell adhesion via cell junctions (PubMed:27958302). Heterophilic interaction with CD177 plays a role in transendothelial migration of neutrophils (PubMed:17580308). Homophilic ligation of PECAM1 prevents macrophage-mediated phagocytosis of neighboring viable leukocytes by transmitting a detachment signal (PubMed:12110892). Promotes macrophage-mediated phagocytosis of apoptotic leukocytes by tethering them to the phagocytic cells; PECAM1-mediated detachment signal appears to be disabled in apoptotic leukocytes (PubMed:12110892). Modulates bradykinin receptor BDKRB2 activation (PubMed:18672896). Regulates bradykinin- and hyperosmotic shock-induced ERK1/2 activation in endothelial cells (PubMed:18672896). Induces susceptibility to atherosclerosis.

Isoform Delta15: Does not protect against apoptosis. [UniProt]

Highlight

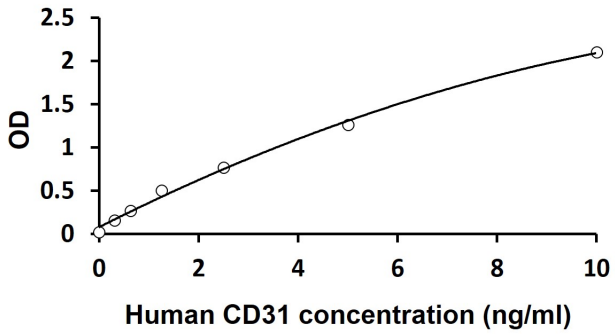
Related products:
CD31 antibodies; CD31 ELISA Kits; CD31 Duos / Panels;
New ELISA data calculation tool:
Simplify the ELISA analysis by GainData

PTM

Phosphorylated on Ser and Tyr residues after cellular activation. Phosphorylated on tyrosine residues by FER and FES in response to FCER1 activation (By similarity). In endothelial cells Fyn mediates mechanical-force (stretch or pull) induced tyrosine phosphorylation.

Palmitoylation by ZDHHC21 is necessary for cell surface expression in endothelial cells and enrichment in membrane rafts. [UniProt]

Images



ARG81322 Human CD31 ELISA Kit standard curve image

ARG81322 Human CD31 ELISA Kit results of a typical standard run with optical density reading at 450 nm.