

Product datasheet for **EA200038**

Human VCAM1 ELISA Kit 1 x 96

Product data:

Product Type:	ELISA Kits
Description:	Human VCAM1 ELISA Kit 1 x 96
Size:	1 x 96 wells
Format:	8x12 divisible strips
Assay Type:	Sandwich
Assay Length:	3.5 hours incubations; 0.5 hour washing and analyzing samples
Signal:	Colorimetric
Curve Range:	0.94-60ng/ml
Sample Type:	Human serum, plasma, and other biological fluids.
Sample Volume:	100µl
Specificity:	This kit is used for quantitative detection of VCAM1
Sensitivity:	0.323ng/ml
Reactivity:	Human
Cross Reactivity:	There is no detectable cross-reactivity with other relevant proteins.
Interference:	No significant interference observed with available related molecules.
Components:	<ul style="list-style-type: none">● VCAM1 Monoclonal Antibody Coated 96-well Plate in foil pouch with desiccant 1 plate● Recombinant Human VCAM1 Standard (3.0µg/ml) 0.1 mL● 100x Biotin conjugated VCAM1 Detection Antibody 0.12 mL● 100x SA-HRP Conjugate 0.12 mL● Assay Buffer 40 mL● Sample Diluent 30 mL● Wash Buffer Concentrate 20X 60 mL● TMB Substrate 12 mL● Stop Solution 12 mL● Plate Sealer 3 pieces



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Background:

Vascular cell adhesion protein 1 also known as vascular cell adhesion molecule 1 (VCAM-1) or cluster of differentiation 106 (CD106) is a cell surface sialoglycoprotein, a type I membrane protein that is a member of the Ig superfamily. VCAM-1 is expressed in endothelial cells in response to VEGF and other cytokines such as TNF α and IL-1 β , and mediates the adhesion of lymphocytes, monocytes, eosinophils, and basophils to vascular endothelium. VCAM-1 expression has also been observed in other cell types such as smooth muscle cells. VCAM-1 also functions in leukocyte-endothelial cell signal transduction, and has been implicated as a mediator of angiogenesis. VCAM-1 expression plays a major role in adhesion of leukocytes to the endothelium in inflamed tissue and in the tumor site. It may also play a role in the development of atherosclerosis and rheumatoid arthritis. Furthermore, it may exert its function as an adhesion molecule to facilitate metastasis. It has been reported that VCAM-1 is over-expressed in various diseases and cancers. One study showed that VCAM-1 expression was associated with the metastasis of melanoma. Recent studies have demonstrated high serum levels of VCAM-1 in patients with colorectal cancer and gastric cancer, and a high serum VCAM-1 level was significantly associated with advanced disease stage and poor prognosis in gastric cancer and breast cancer. VCAM-1 is useful as a non-invasive biomarker for the monitoring of disease progression in cancer and other diseases.

Gene Symbol:

VCAM1

Gene ID:

7412