Anti-VCAM1 Antibody

R1512-13

Product Type:	Rabbit polyclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IF-Cell, IHC-P, FC
Molecular Wt:	Predicted band size: 81 kDa

Description: Cell adhesion molecules are a family of closely related cell surface glycoproteins involved in cell-cell interactions during growth and are thought to play an important role in embryogenesis and development. Neuronal cell adhesion molecule (NCAM) expression is observed in a variety of human tumors including neuroblastomas, rhabdomyosarcomas, Wilms' tumors, Ewing's sarcomas and some primitive myeloid malignancies. The intracellular adhesion molecule-1 (ICAM-1), also referred to as CD54, is an integral membrane protein of the immunoglobulin superfamily and recognizes the B2α1 and B2αM integrins. PECAM-1 (platelet/endothelial cell adhesion molecule-1), also referred to as CD31, is a glycoprotein expressed on the cell surfaces of monocytes, neutrophils, platelets and a subpopulation of T cells. VCAM-1 (vascular cell adhesion molecule-1) was first identified as an adhesion molecule induced on human endothelial cells by inflammatory cytokines such as IL-1, tumor necrosis factor (TNF) and lipopolysaccharide (LPS). The KALIG gene encodes a nerve cell adhesion molecule (NCAM) -like protein and is deleted in 66% of patients with Kallmann's syndrome, anosmia with secondary hypogonadism.

Immunogen: Synthetic peptide within Human VCAM1aa 1-50 / 739.

Positive control: Human spleen tissue lysate, Hela, JAR, SHG-44, human spleen tissue.

Subcellular location: Membrane.

Database links: SwissProt: P19320 Human

Recommended Dilutions:

WB	1:2,000-1:5,000
IF-Cell	1:50-1:200
IHC-P	1:50-1:200
FC	1:50-1:100

Storage Buffer: 1*PBS (pH7.4), 0.2% BSA, 50% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃ or -80℃. Avoid repeated freeze / thaw cycles.

Purity: Immunogen affinity purified.

Images

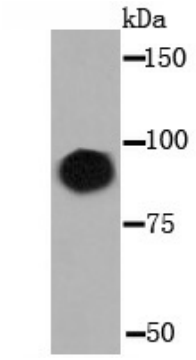

Fig1: Western blot analysis of VCAM1 on human spleen tissue lysate using anti-VCAM1 antibody at 1/5,000 dilution.

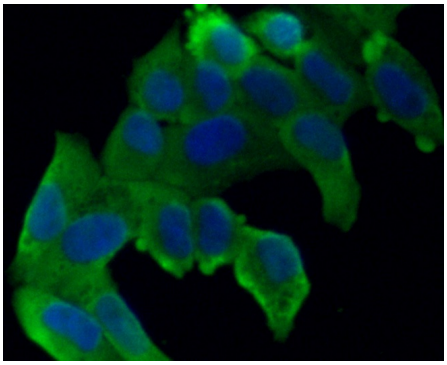

Fig2: ICC staining VCAM1 in Hela cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

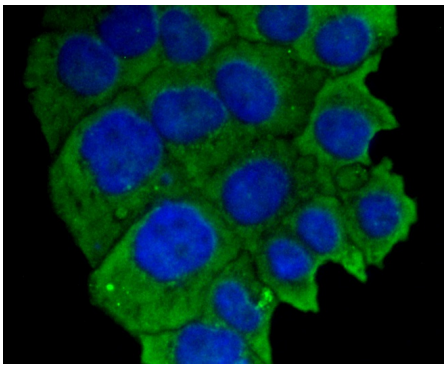

Fig3: ICC staining VCAM1 in JAR cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

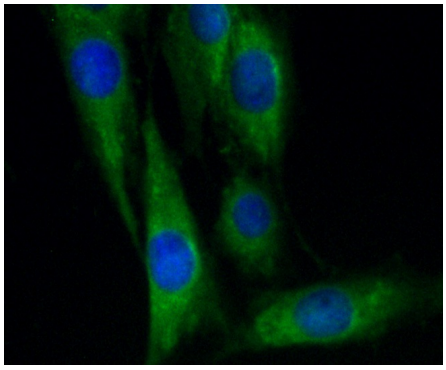

Fig4: ICC staining VCAM1 in SHG-44 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

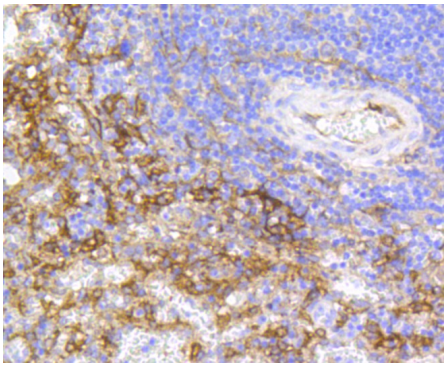

Fig5: Immunohistochemical analysis of paraffin-embedded human spleen tissue using anti-VCAM1 antibody. Counter stained with hematoxylin.

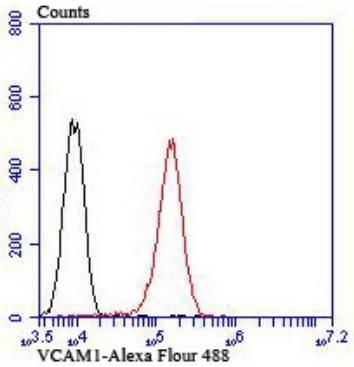

Fig6: Flow cytometric analysis of Hela cells with VCAM1 antibody at 1/100 dilution (red) compared with an unlabelled control (cells without incubation with primary antibody; black).

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Thompson LC et al. Pulmonary instillation of MWCNT increases lung permeability, decreases gp130 expression in the lungs, and initiates cardiovascular IL-6 transsignaling. Am J Physiol Lung Cell Mol Physiol 310:L142-54 (2016).
2. Chen Y et al. Ultrasound-targeted microbubble destruction enhances delayed BMC delivery and attenuates post-infarction cardiac remodelling by inducing engraftment signals. Clin Sci (Lond) 130:2105-2120 (2016).