

Basic Information

Product Name	Anti-VCAM1 Antibody	
Gene Name	VCAM1	
Source	Rabbit	
Isotype	IgG	
Species Reactivity	mouse, rat	
Tested Application	WB, IHC	
Contents	500 ug/ml antibody with PBS , 0.02% NaN3 , 1 mg BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of mouse VCAM1(653-671aa YTIRQAQLQDAGIYECESK), different from the related human sequence by three amino acids, and from the related rat sequence by two amino acids.	
concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	85-110KD	
Dilution Ratios	Western blot(WB): 1:500-2000 Immunohistochemistry in paraffin section (IHC): 1:50-400 (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

Background Information

CD106(cluster of differentiation 106) also known as vascular cell adhesion molecule 1(VCAM-1),is a protein that in humans is encoded by the VCAM1 gene. In inflammatory conditions and in cardiac allografts undergoing rejection, VCAM1 is upregulated in endothelium of postcapillary venules. Arterial expression of VCAM1 is also found in experimental models of atherosclerosis in the rabbit. Cybulsky et al.(1991) mapped the VCAM1 gene to chromosome 1 by Southern analysis of somatic cell hybrids. Kumar et al.(1994) mapped the murine Vcam1 gene to chromosome 3 near Amy1.VCAM-1 functions as a cell adhesion molecule. The VCAM-1 protein mediates the adhesion of lymphocytes,monocytes, eosinophils, andbasophils to vascularendothelium. It also functions in leukocyte-endothelial cell signal transduction, and it may play a role in the development ofatherosclerosis and rheumatoid arthritis. CAM741 works similar to cotransin in that it represses the biosynthesis of VCAM1 cells by blocking the process of cotranslational translocation, which is dependent on the signal peptide ofVCAM1. Among the lung metastasis signature genes identified, several, includingVCAM1, were functionally validated.

Reference

Anti-VCAM1 Antibody被引用在3文献中。

Selected Validation Data

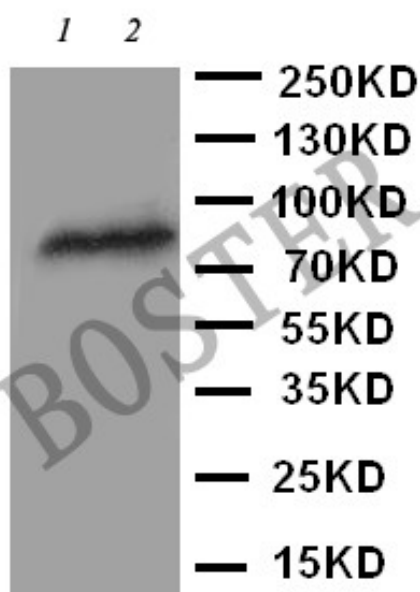


Figure 1. Western blot analysis of anti-VCAM1 antibody (BA3840). The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: Rat kidney tissue lysates, Lane 2: Rat spleen tissue lysates. Use rabbit anti-VCAM1 1:1000, probed with a goat anti-rabbit IgG-HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002). A specific band was detected for VCAM1 at approximately 81KD. The expected band size for VCAM1 is at 81KD.

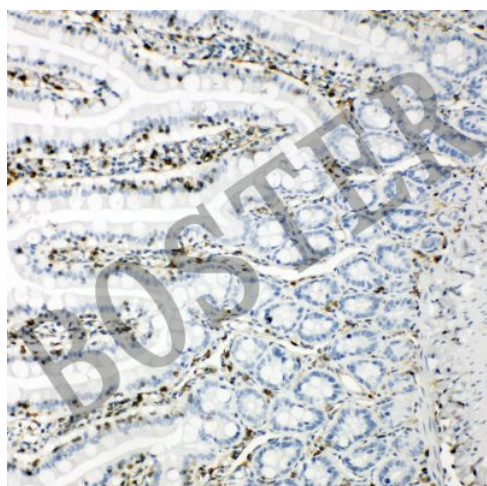


Figure 2. IHC analysis using anti-VCAM1 antibody (BA3840). detected in paraffin-embedded section of rat intestinal tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.