

CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	VCAM-1, Mouse, clone 6C7.1	Expiry date	-
Catalog number	HM1107-20UG	Amount	20 µg
Lot number	-	Concentration	100 µg/ml
Volume	200 µl	Conjugate	None
Formulation	0.2 µm filtered in PBS+0.1%BSA	Purification	Protein G
Host Species	Rat IgG1		
Endotoxin	<24 EU/mg		
Storage	4°C		

Application notes

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #								
Yes	•		•	•	•		•	
No								
N.D.		•				•		•

N.D.= Not Determined; *IHC* = Immuno histochemistry; *F* = Frozen sections; *P* = Paraffin sections; *IF* = Immuno Fluorescence; *FC* = Flow Cytometry; *FS* = Functional Studies; *IA* = Immuno Assays; *IP* = Immuno Precipitation; *W* = Western blot

Dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50.

General Information

Description	<p>The monoclonal antibody 6C7.1 recognizes mouse vascular cell adhesion molecule (VCAM-1) (~ 81 kDa), a member of a subclass of the immunoglobulin superfamily (IgSF). IgSF members are ligands for integrins. Cell adhesion molecules (CAMs) have important roles in the immune response, immune surveillance and cell-cell recognition, especially in leukocyte-endothelial cell adhesion. CAMs on the surface of leukocytes and endothelial cells are actively involved in the recruitment of specific leukocyte subsets into different tissues.</p> <p>VCAM-1 is expressed on inflamed vascular endothelium, as well as on macrophage-like and dendritic cell types in both normal and inflamed tissue. Cell adhesion molecules, like VCAM-1, are upregulated on cerebral vessels during inflammatory conditions of the central nervous system such as experimental autoimmune encephalomyelitis (EAE), a model system for multiple sclerosis. Administration of monoclonal antibody 6C7.1 has been shown to inhibit or diminish clinical or pathological signs of EAE. VCAM-1 is a receptor for encephalomyocarditis virus on murine vascular endothelial cells. Expression of VCAM-1 on vascular endothelial cells is induced by TNF-alpha, IL-1, IFN-gamma or endotoxin. VCAM-1 is a ligand for the integrins alpha4beta1 (VLA-4) and alpha4beta7 (LPAM-1). These integrins are constitutively expressed by thymocytes, lymphocytes and monocytes. VCAM-1/VLA-4 interaction may play a pathophysiological role in immune responses and as well as in leukocyte emigration to sites of inflammation.</p>
Immunogen	Mouse endothelial cells
Aliases	CD106, INCAM-100, Vascular cell adhesion protein 1
References	<ol style="list-style-type: none"> Engelhardt B et al; The development of experimental autoimmune encephalomyelitis in the mouse requires alpha4-Integrin but not alpha4beta7-Integrin. <i>J Clin Invest</i> 1998, <i>102</i>: 2096 Vajkoczy P et al; Alpha4-integrin-VCAM-1 binding mediates G protein-independent capture of encephalitogenic T cell blasts to CNS white matter microvessels. <i>J Clin Invest</i> 2001, <i>108</i>: 557 Kuligowski M et al; Antimyeloperoxidase antibodies rapidly induce {alpha}4-integrin-dependent glomerular neutrophil adhesion. <i>Blood</i> 2009, <i>113</i>: 6485 Kneilling M et al; Direct crosstalk between mast cell TNF and TNFR1-expressing endothelia mediates local tissue inflammation. <i>Blood</i> 2009, <i>114</i>: 1696

Storage&stability Product should be stored at 4°C. Under recommended storage conditions, product is stable for at least one year.

Precautions For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and federal rules in the use of this product. Hycult Biotech is not responsible for any patent infringements that might result from the use or derivation of this product.

We hereby certify that the above-stated information is correct and that this product has been successfully tested by the Quality Control Department. This product was released for sale according to the existing specifications. This document has been produced electronically and is valid without a signature.

Approved by Manager of QC
Brenda Teunissen

Date
11/11/2020

Do you have any questions or comments regarding this product? Please contact us via support@hycultbiotech.com.