

**MONOCLONAL ANTIBODY TO
HUMAN JUNCTIONAL ADHESION MOLECULE (JAM-A)
clone BV16**



Catalog no	HM2098 (lot number and expiry date are indicated on the label)																																					
Description	<p>The monoclonal antibody BV16 recognizes the human junction adhesion molecule (JAM)-A. Together with JAM-C (JAM-2) and JAM-B (VE-JAM or JAM-3), JAM-A belongs to a family of adhesion proteins with a V-C2 immunoglobulin domain organization and their molecular weight is about 30-40 kDa. JAMs are important for a variety of cellular processes, including tight junction assembly, leukocyte transmigration, platelet activation, angiogenesis and virus binding. JAM-A is expressed by endothelial and epithelial cells, platelets, neutrophils, monocytes, lymphocytes and erythrocytes. Like all other JAMs, JAM-A plays an important role in tight junctions where it is involved in cell-to-cell adhesion through homophilic interaction. It codistributes with other tight junction components as ZO-1, 7H6 antigen, cingulin and occludin. JAM-A also plays an important role in leukocyte transmigration. Leukocyte transmigration can be blocked by antibodies and by soluble JAM-A/Fc fusion proteins. Homophilic JAM-A interactions between leukocytes and the endothelium but also heterophilic interactions of JAM-A with the beta2-integrin leukocyte function-associated antigen-1 (LFA-1) are considered to actively guide leukocytes during transmigration. Several studies imply a role for JAM-A in the initiation of atherosclerosis since JAM-A is upregulated on early atherosclerotic endothelium. The adhesion of activated platelets on the activated endothelium is mediated by homophilic interactions of JAM-A.</p>																																					
Aliases	PAM-1, JAM-1, JAMA, CD321, platelet F11 receptor																																					
Immunogen	Fusion protein consisting of the extracellular domain of human JAM and the Fc portion of human IgGs																																					
Species	Mouse IgG ₁																																					
Formulation	1 ml (100 µg/ml) 0.2 µm filtered antibody solution in PBS, containing 0.1% bovine serum albumin and 0.02% sodium azide.																																					
Application	<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th></th> <th>F</th> <th>FC</th> <th>FS</th> <th>IA</th> <th>IF</th> <th>IP</th> <th>P</th> <th>W</th> </tr> </thead> <tbody> <tr> <td>Yes</td> <td style="text-align: center;">•</td> <td style="text-align: center;">•</td> <td></td> <td></td> <td style="text-align: center;">•</td> <td style="text-align: center;">•</td> <td></td> <td style="text-align: center;">•</td> </tr> <tr> <td>No</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>N.D.</td> <td></td> <td></td> <td style="text-align: center;">•</td> <td style="text-align: center;">•</td> <td></td> <td></td> <td style="text-align: center;">•</td> <td></td> </tr> </tbody> </table>			F	FC	FS	IA	IF	IP	P	W	Yes	•	•			•	•		•	No									N.D.			•	•			•	
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Yes	•	•			•	•		•																														
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N.D.			•	•			•																															
	<p>N.D.= Not Determined; F = Frozen sections; FC = Flow Cytometry; FS = Functional Studies; IA = Immuno Assays; IF = Immuno Fluorescence; IP = Immuno Precipitation; P = Paraffin sections; W = Western blot</p>																																					
Use	For immunohistology, Western blotting and flow cytometry, 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.																																					
Storage and stability	Product should be stored at 4°C. Under recommended storage conditions, product is stable for 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. Hbt is not responsible for any patent infringements that might result from the use or derivation of this product.																																					
References	<ol style="list-style-type: none"> Bazzoni, G et al; Interaction of junctional adhesion molecule with the tight junction components ZO-1, cingulin, and occludin. <i>J Biol Chem</i> 2000, 275: 20520 Luo, Y et al; Effects of culture conditions on heterogeneity and the apical junctional complex of the ARPE-19 cell line. <i>Invest Ophthalmol Vis Sci</i> 2006, 47: 3644 Faure, V et al; The uremic solute p-cresol decreases leukocyte transendothelial migration <i>in vitro</i>. <i>Int Immunol</i> 2006, 18: 1453 Vetrano, S et al; Unique role of junctional adhesion molecule-A in maintaining mucosal homeostatis in inflammatory bowel disease. <i>Gastroenterol</i> 2008, 135: 173 																																					
Also available	HM2098F	FITC conjugated monoclonal antibody against Human JAM-A, clone BV16																																				
	HM2099	Monoclonal antibody against Human JAM-A (JAM-1), clone M.Ab.F11																																				

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HM2102	Monoclonal antibody against Human Barmotin/7H6 antigen, clone 7H6
HP9041	Polyclonal antibody against Human JAM-A (JAM-1), extracellular domain 1
HP9042	Polyclonal antibody against Human JAM-A (JAM-1), extracellular domain 2