

**POLYCLONAL ANTIBODY TO
HUMAN JUNCTIONAL ADHESION MOLECULE-A (JAM-A)
Extracellular domain 2**



Catalog nr	HP9042 (lot number and expiry date are indicated on the label)
Description	The polyclonal antibody reacts with the second extracellular domain of human junction adhesion molecule (JAM)-A (also known as JAM, JAM-1 or F11R). 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. 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 play 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 β 2-integrin leukocyte function-associated antigen-1 (LFA-1) are considered to actively guide leukocytes during transmigration. Several studies imply a role of JAM-A in the initiation of atherosclerosis, since JAM-A is upregulated on early atherosclerotic endothelium and adhesion of activated platelets on activated endothelium is mediated by homophilic interactions of JAM-A. The polyclonal antibody reacts with the 17 kDa extracellular domain 2 of the human JAM-A protein. The immunogen used for rabbit immunization is the extracellular domain of full-length human JAM-A. The antibody does not react with mouse JAM-A.
Species	Rabbit Ig
Formulation	1 ml (100 μ g/ml) 0.2 μ m filtered antibody solution in PBS, containing 0.02% sodium azide and 0.1% bovine serum albumin.
Application	The polyclonal antibody can be used for Western blot and flow cytometry. Furthermore, the polyclonal antibody is useful for histology on paraffin embedded sections. The antibody is not useful for immuno assays.
Use	For Western blot, flow cytometry and immunohistology 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. Hycult Biotech is not responsible for any patent infringements that might result with the use of or derivation of this product.
References	<ol style="list-style-type: none">1. Fraemohs, L et al; The functional interaction of the beta 2 integrin lymphocyte function-associated antigen-1 with junctional adhesion molecule-A is mediated by the I domain. <i>J Immunol</i> 2004, 173: 62592. Ostermann, G et al; Involvement of JAM-A in mononuclear cell recruitment on inflamed or atherosclerotic endothelium: inhibition by soluble JAM-A. <i>Arterioscler Thromb Vasc Biol</i> 2005, 25: 7293. Ostermann, G et al; JAM-1 is a ligand of the beta(2) integrin LFA-1 involved in transendothelial migration of leukocytes. <i>Nat Immunol</i> 2002, 3: 1514. Zernecke, A et al; Importance of JAM-A for neointimal lesion formation and infiltration in atherosclerosis-prone mice. <i>Arterioscler Thromb Vasc Biol</i> 2006, 26: e10
Also available	HM2102 Monoclonal antibody against Human 7H6 antigen, clone 7H6 HM2098 Monoclonal antibody against Human JAM-A (JAM-1), clone BV16 HM2099 Monoclonal antibody against Human JAM-A (JAM-1), clone M.Ab.F11 HP9041 Polyclonal antibody against Human JAM-A (JAM-1), extracellular domain 1