CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	JAM-A, domain 2, Human, pAb		
Catalog number	HP9042-20UG		
Lot number	-	**Expiry date**	-
Volume	200 µl	**Amount**	20 µg
Formulation	0.2 µm filtered in PBS+0.1%BSA+0.02%NaN3	**Concentration**	100 µg/ml
Host Species	Rabbit Ig	**Conjugate**	None
Endotoxin	N.A.	**Purification**	Protein A
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

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 b2-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.

Immunogen

The extracellular domain of full-length human JAM-A.

Aliases

Junctional Adhesion Molecule-A

Cross reactivity

Mouse: No

References

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. J Immunol 2004, 173: 6259
2. Ostermann, G et al; Involvement of JAM-A in mononuclear cell recruitment on inflamed or atherosclerotic endothelium: inhibition by soluble JAM-A. Arterioscler Thromb Vasc Biol 2005, 25: 729
3. Ostermann, G et al; JAM-1 is a ligand of the beta(2) integrin LFA-1 involved in transendothelial migration of leukocytes. Nat Immunol 2002, 3: 151
4. Zernecke, A et al; Importance of JAM-A for neointimal lesion formation and infiltration in atherosclerosis-prone mice. Arterioscler Thromb Vasc Biol 2006, 26: e10

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	Date
Brenda Teunissen	31/03/2021

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