

CERTIFICATE OF ANALYSIS - TECHNICAL DATA SHEET

Product name JAM-A, Human, clone BV16

Catalog number HM2098-20UG

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 Mouse IgG1 Conjugate None

Endotoxin N.A. Purification Protein G

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 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.

Immunogen

Fusion protein consisting of the extracellular domain of human JAM and the Fc portion of human IgGs

Aliases

Junctional Adhesion Molecule, PAM-1, JAM-1, JAMA, CD321, platelet F11 receptor

References

- Bazzoni, G et al; Interaction of junctional adhesion molecule with the tight junction components ZO-1, cingulin, and occludin. J Biol Chem 2000, 275: 20520
- Luo, Y et al; Effects of culture conditions on heterogeneity and the apical junctional complex of the ARPE-19 cell line. Invest Ophthalmol Vis Sci 2006, 47: 3644
- Faure, V et al; The uremic solute p-cresol decreases leukocyte transendothelial migration in vitro. Int Immunol 2006. 18: 1453
- 4. Vetrano, S et al; Unique role of junctional adhesion molecule-A in maintaining mucosal homeostatis in inflammatory bowel disease. Gastroenterol 2008, *135*: 173

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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 16/11/2020

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