PRODUCT DATA SHEET

Product: **Anti-JAM-1 mAb, clone BV16**

Cat. No.: **MC-198 (100 µg)**

Synonyms:
Human platelet F11-Receptor (F11R)

Description:
Junctional adhesion molecule-1 (JAM-1) is a cell adhesion molecule (CAM). JAM-1 is a member of the immunoglobulin superfamily found on the surface of human platelets and at intercellular junctions of endothelial cells and epithelial cells. JAM-1 belongs together with JAM-2 and JAM-3 to a family of adhesion proteins with a V-C2 immunoglobulin domain organization. JAM plays an important role in tight junctions where it is involved in cell-to-cell adhesion through homophilic interaction. It co-distributes with other tight junction components such as ZO-1, 7H6 antigen, cingulin and occludin. In humans JAM-1 plays a role in platelet aggregation, secretion, adhesion and spreading.

JAM-1 is a membrane protein involved in 2 distinct processes initiated on the platelet surface. Antibody-induced platelet aggregation and secretion both depend on FcgammaRII and GPIIb/IIIa integrin, a process that may be involved in pathophysiological processes associated with certain thrombocytopenias. Antibody mediated platelet adhesion independent from FcgammaRII or fibrinogen receptor and that appears to play a role in physiological processes associated with platelet adhesion and aggregation. A physiological role for the JAM-1 protein was demonstrated by its phosphorylation after the stimulation of platelets by thrombin and collagen. A pathophysiological role for the JAM-1 was revealed by demonstrating the presence of JAM-1 antibodies in patients with thrombocytopenia. Adhesion of platelets through the F11R resulted in events characteristic of the action of cell adhesion molecules (CAMs). Recent data suggests a role for JAM-1 in the adhesion of platelets to cytokine-inflamed endothelial cells and thus in thrombosis and atherosclerosis induced in non-denuded blood vessels by inflammatory processes.

Specificity:
Recognizes human JAM-1.

Ig Isotype:
Mouse IgG_1

Species Reactivity:
Human. Others not tested.

Format:
1 mL of 100 µg/mL 0.2 µm filtered antibody solution in PBS containing 0.1% protein stabilizer and 0.02% sodium azide.

Storage:
Store at 4°C.

Applications and Suggested Dilutions:
- Flow cytometry: Use at a 1:10 dilution.
- Immunohistochemistry (frozen sections or cell monolayers) Use at a 1:10 dilution.

The optimal dilution for a specific application should be determined by the researcher.

Limitations:
For *in vitro* research use only. Not for use in diagnostics or in humans.

Warranty:
No warranties, expressed or implied, are made regarding the use of this product. KAMIYA BIOMEDICAL COMPANY is not liable for any damage, personal injury, or economic loss caused by this product.