

PRODUCT INFORMATION



CD36 Monoclonal Antibody (Clone JC63.1) (Low Endotoxin)

Item No. 10009893

Overview and Properties

Contents:	This vial contains 100 µg or 500 µg of purified IgA
Synonyms:	GP1Ib, GPIV, Platelet Glycoprotein 4, Fatty Acid Translocase, PAS IV, Platelet Collagen Receptor, Thrombospondin Receptor
Immunogen:	Recombinant adenovirus expressing full-length mouse CD36 ⁴
Species Reactivity:	(+) Human, mouse, rat; other species not tested
Uniprot No.:	Q08857
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥1 year
Storage Buffer:	PBS, pH 7.2
Clone:	JC63.1
Host:	CD36 null mouse
Isotype:	IgA
Applications:	Flow cytometry (FC), functional blocking, and immunocytochemistry (ICC); the recommended starting concentration for FC and ICC is 0.5 µg/ml. For functional blocking, a concentration of 2 µg/ml inhibits CD36 binding of oxLDL (macrophages) and prevents foam cell formation of macrophages. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Description

CD36 is a type-B scavenger receptor that is necessary for the formation of foam cells and thereby atherosclerotic lesions.¹⁻⁴ This membrane glycoprotein can internalize fatty acids which activate PPAR γ and stimulate further expression of CD36.^{5,6} This positive feedback loop combined with the murine CD36 knock-out studies reinforces the importance of CD36 in lipid metabolism. Additionally CD36 is needed for the phagocytosis of *P. falciparum* infected erythrocytes, retinal pigment epithelial cell photoreceptor fragments and post-apoptotic monocytes and neutrophils.⁷⁻¹⁰ CD36 expression has been monitored during hematopoietic cell differentiation and may be an indicator of tumor spreading in lymphocytic leukemia.¹¹ Positive controls include adipose and heart tissue, platelets, and macrophages. Cayman's CD36 Monoclonal Antibody (Clone JC63.1) (Low Endotoxin) can be used for flow cytometry, functional blocking, and immunocytochemistry applications with endotoxin levels of ≤2 EU/mg. Lower endotoxin levels can be achieved upon request.

References

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WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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