abcam

ab275706

FITC Anti-CD204 antibody [004]

Recombinant

Key facts

Isotype	IgG
Host species	Rabbit
Conjugation	FITC
Excitation/Emission	Ex: 495nm, Em: 519nm
Storage buffer	Preservative: 0.09% Sodium azide Constituents: 0.5% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	Recombinant Fragment Protein within Mouse Msr1 aa 50 to C-terminus. The exact immunogen used to generate this antibody is proprietary information. Database link P30204
Clone number	004
Purification technique	Affinity purification Protein A

Reactivity data

Flow Cyt

Tested

Species	Mouse
Dilution info	-
Notes	10 µl/Test.

Target data

See full target information Msr1

Function	Membrane glycoproteins implicated in the pathologic deposition of cholesterol in arterial walls during atherogenesis. Two types of receptor subunits exist. These receptors mediate the endocytosis of a diverse group of macromolecules, including modified low density lipoproteins (LDL).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze, Store in the dark

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	CD204 also known as MSR1 or the macrophage scavenger receptor 1 is a class A scavenger receptor. It has a molecular mass of approximately 80-85 kDa. CD204 is mainly expressed on the surface of macrophages as well as some dendritic cells. This receptor plays a role in mediating the endocytosis of various polyanionic molecules such as modified low-density lipoproteins. CD204 serves as a recognition site for apoptotic cells signaling molecules and some types of bacteria.
Biological function summary	CD204 influences inflammatory responses and lipid metabolism. It does not function alone but as part of a complex involving several other molecules like pattern recognition receptors. CD204 recognizes and binds to modified lipoproteins and is significant in processes like phagocytosis and clearance of cellular debris. Its activity affects immune response modulation and can influence atherosclerosis development by its interaction with oxidized low-density lipoproteins.
Pathways	The role of CD204 extends to key cellular and immunological pathways. This receptor is involved in the Toll-like receptor signaling pathway which is important for innate immunity besides participating in the macrophage activation pathways. In these pathways CD204 interacts with other proteins including CD36 and SRA. This interaction helps coordinate inflammatory responses and the resolution of inflammation.

Associated diseases and disorders	CD204 is associated with atherosclerosis and chronic inflammation. Its connection with these conditions arises from its role in lipid uptake and immune cell regulation within the vascular system. In the context of atherosclerosis CD204's interaction with Apolipoprotein E (ApoE) influences the formation of foam cells which are significant in the disease's progression. Similarly in chronic inflammation CD204 modulates macrophage behavior impacting the inflammatory environment and potentially affecting the disease outcome.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

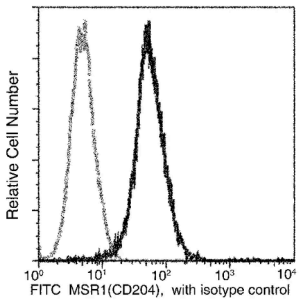
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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1 product image



Flow Cytometry - FITC Anti-CD204 antibody [004] (ab275706)

CD204 Flow Cytometry staining using rabbit Anti-CD204 antibody

Flow cytometry analysis of RAW 264.7 (mouse macrophage cell line transformed with Abelson murine leukemia virus) cells labeling CD204 with ab275706 (Black) at 10 µl/Test compared with an isotype control (Grey). Cells should be Fc-blocked by treatment with a mouse BD Fc Block purified anti-CD16/CD32 mAb 2.4G2 prior to staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.