abcam

ab34096

Anti-CD11d antibody [CA11.8H2]

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	pH: 7.4 Preservative: 0.09% Sodium azide Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Clone number	CA11.8H2
Purification technique	Affinity purification Protein A
Specificity	ab34096 recognises the canine CD11d cell surface antigen (the integrin ad sub-unit).
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Expected

Species	Dog
Dilution info	1/50 - 1/200
Notes	Use 10µl of the suggested working dilution to label 10^6 cells or 100µl whole blood

IHC-P

Not recommended

Species	Dog
Dilution info	-
Notes	-

Target data

See full target information CD11d

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot

Supplementary info

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

Activity summary	CD11d also known as integrin alpha D is a protein that plays a vital role in the adhesion and migration of leukocytes. CD11d forms a heterodimer with CD18 creating the integrin alpha D beta 2 complex. This complex weighs approximately 200 kDa and is expressed mainly on monocytes macrophages and dendritic cells. CD11d is involved in the immune response particularly in the adhesion between cells and the extracellular matrix which facilitates leukocyte trafficking and tissue infiltration.
Biological function summary	CD11d is part of the integrin family a group of proteins that mediate cell surface interactions. It supports the immune surveillance role by allowing immune cells to adhere to and migrate across the vascular endothelium. CD11d is part of the αDβ2 complex which binds to several ligands including ICAM-3 and VCAM-1. This binding is essential for leukocyte migration and establishing immune cell positions during inflammation and immune responses. The protein is expressed more in conditions requiring heightened immune activities or repair.

Pathways	CD11d functions in the leukocyte adhesion cascade and interacts with various proteins such as CD18. The integrin-mediated signaling pathway sees CD11d playing a role linked to immune cell positioning and movement. It contributes to pathways associated with inflammation such as the activation of leukocytes. The signaling through the CD11d/CD18 complex affects downstream signaling events that modulate cell survival apoptosis and cytokine production.
Associated diseases and disorders	CD11d plays a role in inflammatory diseases like atherosclerosis and chronic obstructive pulmonary disease (COPD). In atherosclerosis CD11d is linked with macrophage recruitment to the sites of developing arterial plaques. It often interacts with other integrins like CD11b influencing the extent of inflammation and plaque stability. In COPD CD11d contributes to the recruitment and retention of inflammatory cells in the lungs promoting tissue damage and disease progression. Interfering with CD11d expression or its binding capabilities presents potential therapeutic pathways for managing these conditions.

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.

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