abcam

ab328594

APC Anti-CD371/ CLEC12A antibody [50C1]

Key facts

Isotype	IgG2a
Host species	Mouse
Conjugation	APC
Excitation/Emission	Ex: 650nm, Em: 660nm
Storage buffer	pH: 7.4 Preservative: 0.1% Sodium azide Constituents: PBS, 0.2% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	293T cells expressing human CD371-Flag. Database link Q5QGZ9
Clone number	50C1
Purification technique	Size-exclusion chromatography
Specificity	The mouse monoclonal antibody 50C1 recognizes an extracellular epitope of CD371, a type II transmembrane glycoprotein expressed above all on monocytes, macrophages, granulocytes and dendritic cells.

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	-

Notes	Flow cytometry: The reagent is designed for analysis of human blood cells using 10 µl reagent / 100 µl of whole blood or 10^6 cells in a suspension. The content of a vial (1 ml) is sufficient for 100 tests.

Target data

See full target information CLEC12A

Function	Myeloid inhibitory C-type lectin receptor that acts as a negative regulator of myeloid cell activation (PubMed:14739280, PubMed:15238421, PubMed:16239426, PubMed:34234773, PubMed:38367667, PubMed:38386511, PubMed:39143217). Myeloid cell inhibition is required to limit proinflammatory pathways and protect against excessive inflammation (By similarity). Specifically recognizes and binds various structures, such as neutrophil extracellular traps (NETs) or monosodium urate crystals (PubMed:38367667, PubMed:38386511, PubMed:39143217). Also acts as a pattern-recognition receptor for pathogen-associated molecules, such as plasmodium hemozoin or mycobacterial micolic acid (PubMed:31269448, PubMed:36542980). Ligand-binding induces phosphorylation of its ITIM motif, followed by recruitment of tyrosine-protein phosphatases PTPN6 and PTPN11, which counteract tyrosine-protein kinase SYK, thereby preventing myeloid cell activation (PubMed:14739280, PubMed:16239426, PubMed:34234773). Acts as a pattern-recognition receptor for NETs in neutrophils: specifically recognizes DNA in NETs, leading to inhibit neutrophil activation and limit further NET formation (PubMed:39143217). This regulation is essential for controlling key neutrophil responses and limit NET-mediated inflammatory conditions (By similarity). Also recognizes dead cells by acting as a receptor for monosodium urate crystals, leading to down-regulate neutrophil activation (PubMed:38367667, PubMed:38386511). Binding to monosodium urate crystals also promotes the type I interferon response (By similarity). Acts as an inhibitor of natural killer (NK) cell cytotoxicity (PubMed:15238421). Also acts as an inhibitor of dendritic cell maturation in an IL10-dependent manner (PubMed:16239426).

Storage

Shipped at conditions	Ambient - Can Ship with Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

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

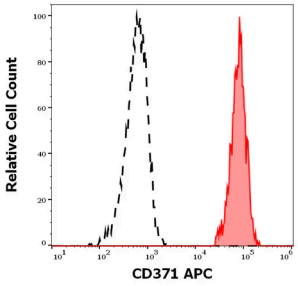
We do not recommend this combination. It is not covered by our product promise.

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.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
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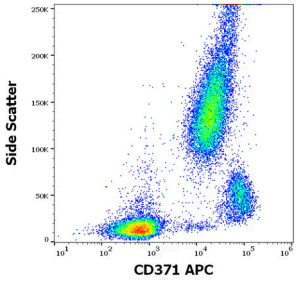
2 product images



Flow Cytometry - APC Anti-CD371/ CLEC12A antibody [50C1] (ab328594)

CD371/ CLEC12A Flow Cytometry staining of human peripheral whole blood using mouse Anti-CD371/ CLEC12A antibody

Separation of human monocytes (red-filled) from lymphocytes (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using anti-human CD371 (50C1) APC antibody (concentration in sample 0.56 µg/ml).



Flow Cytometry - APC Anti-CD371/ CLEC12A antibody [50C1] (ab328594)

CD371/ CLEC12A Flow Cytometry staining of human peripheral whole blood using mouse Anti-CD371/ CLEC12A antibody

Flow cytometry surface staining pattern of human peripheral whole blood stained using anti-human CD371 (50C1) APC antibody (concentration in sample 0.56 µg/ml).

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