abcam

ab314420

APC Anti-CD24 antibody [EPR19925]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Conjugation	APC
Excitation/Emission	Ex: 650nm, Em: 660nm
Storage buffer	pH: 7.4 Preservative: 0.02% Sodium azide Constituents: PBS, 1% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR19925
Purification technique	Affinity purification Protein A
Concentration	0.5 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	1/100

Notes	-

ICC/IF

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Target data

See full target information CD24

Function	May have a pivotal role in cell differentiation of different cell types. Signaling could be triggered by the binding of a lectin-like ligand to the CD24 carbohydrates, and transduced by the release of second messengers derived from the GPI-anchor. Modulates B-cell activation responses. Promotes AG-dependent proliferation of B-cells, and prevents their terminal differentiation into antibody-forming cells (PubMed:11313396). In association with SIGLEC10 may be involved in the selective suppression of the immune response to danger-associated molecular patterns (DAMPs) such as HMGB1, HSP70 and HSP90. Plays a role in the control of autoimmunity (By similarity).

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	+4°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle, Store in the dark

Notes

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Supplementary info

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

Activity summary	CD24 also known as heat-stable antigen or CD24A is a glycosylphosphatidylinositol (GPI)-anchored membrane protein with a molecular mass of approximately 30-50 kDa. It is expressed on the surface of many cell types including B cells T cells neutrophils and epithelial cells. CD24 plays a role in cell adhesion and signaling processes impacting immune response and cancer progression. Its expression is often used as a marker in identification and classification procedures such as flow cytometry.
Biological function summary	CD24 functions like a molecular "switch" modulating signals sent between cells. It acts as a ligand for multiple receptors and participates in cellular communication especially influencing the immune system. Part of its biological role involves interaction within cellular complexes impacting immune modulation and inflammatory responses. CD24's location at the interface of cellular microenvironments makes it critical for cellular response adaptation to varied external stimuli.
Pathways	CD24 participates in both immune signaling and cancer-related pathways. It plays a significant role in the suppression of the immune response often interacting with proteins like Siglec-10 in these pathways. CD24's involvement in these pathways contributes to cell survival and proliferation particularly within cancer development. The protein’s interaction within specified signaling pathways allows it to influence downstream targets that regulate gene expression and cellular functions.
Associated diseases and disorders	CD24 has significant connections to cancer and inflammatory diseases. It is highly expressed in various cancers including breast and prostate cancer where it correlates with poor prognosis due to its role in apoptosis evasion and metastasis. CD24 interacts with proteins like HMGB1 and is implicated in inflammatory conditions where it modulates immune cell activity. Extensive research into CD24's involvement in these disorders may lead to targeted therapies including the development of anti-CD24 antibodies for therapeutic interventions.

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.

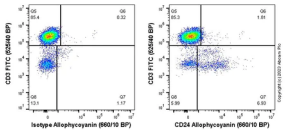
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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:
Terms & Conditions.

---

2 product images

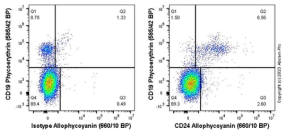


Flow Cytometry - APC Anti-CD24 antibody [EPR19925] (ab314420)

CD24 Flow Cytometry staining of Human peripheral blood mononuclear cells (PBMCs) using rabbit Anti-CD24 antibody

Flow cytometry staining of human peripheral blood mononuclear cells (PBMCs) with ab314420 (right) or APC Rabbit IgG, monoclonal [EPR25A] - Isotype Control (left). PBMCs were incubated for 30 min on ice in 1x PBS containing 10 µg/ml human IgG and 10% normal goat serum to block FC receptors and non-specific protein-protein interaction followed by the antibody ab314420 or APC Rabbit IgG, monoclonal [EPR25A] - Isotype Control (1x 10^6 in 100 µl at 5.0 µg/ml (1/100)) for 30min on ice. The cells were simultaneously stained with CD3.

Acquisition of >30000 events were collected using a 40 mW Red laser (638nm) and 660/10 bandpass filter. Events were gated on viable lymphocytes.



Flow Cytometry - APC Anti-CD24 antibody [EPR19925] (ab314420)

CD24 Flow Cytometry staining of Human peripheral blood mononuclear cells (PBMCs) using rabbit Anti-CD24 antibody

Flow cytometry staining of human peripheral blood mononuclear cells (PBMCs) with ab314420 (right) or APC Rabbit IgG, monoclonal [EPR25A] - Isotype Control (left). PBMCs were incubated for 30 min on ice in 1x PBS containing 10 µg/ml human IgG and 10% normal goat serum to block FC receptors and non-specific protein-protein interaction followed by the antibody ab314420 or APC Rabbit IgG, monoclonal [EPR25A] - Isotype Control (1x 10^6 in 100 µl at 5.0 µg/ml (1/100)) for 30min on ice. The cells were simultaneously stained with CD19.

Acquisition of >30000 events were collected using a 40 mW Red laser (638nm) and 660/10 bandpass filter. Events were gated on viable lymphocytes.

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