abcam

ab268024

# Anti-CD73 antibody [EPR23048-139] - BSA and Azide free

Recombinant | RabMAb

## Key facts

| | |
|---|---|
| **Isotype** | IgG |
| **Host species** | Rabbit |
| **Storage buffer** | pH: 7.2 - 7.4 Constituents: PBS |
| **Form** | Liquid |
| **Clonality** | Monoclonal |
| **Immunogen** | The exact immunogen used to generate this antibody is proprietary information. |
| **Carrier free** | Yes |
| **Clone number** | EPR23048-139 |
| **Purification technique** | Affinity purification Protein A |
| **Concentration** | 1.003 mg/mL The concentration of this product may be batch-dependent<br>Batch concentration finder → |

## Reactivity data

## IP

### Not recommended

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | - |

| | |
|---|---|
| **Notes** | - |

## Flow Cyt

### Tested

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | - |
| **Notes** | - |

## WB

### Not recommended

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | - |
| **Notes** | - |

## IHC-P

### Not recommended

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | - |
| **Notes** | - |

## ICC/IF

### Not recommended

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | - |
| **Notes** | - |

# Target data

See full target information NT5E

| | |
|---|---|
| **Function** | Catalyzes the hydrolysis of nucleotide monophosphates, releasing inorganic phosphate and the corresponding nucleoside, with AMP being the preferred substrate (PubMed:21933152, PubMed:22997138, PubMed:23142347, PubMed:24887587, PubMed:34403084). Shows a preference for ribonucleotide monophosphates over their equivalent deoxyribose forms (PubMed:34403084). Other substrates include IMP, UMP, GMP, CMP, dAMP, dCMP, dTMP, NAD and NMN (PubMed:21933152, PubMed:22997138, PubMed:23142347, PubMed:24887587, PubMed:34403084). |

## 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 |

## Notes

ab268024 is the carrier-free version of ab227030.

**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.

**Conjugation ready**
Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

**Compatibility**
This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

## Supplementary info

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

| | |
|---|---|
| **Activity summary** | CD73 also known as ecto-5'-nucleotidase is an enzyme that functions at the cellular level. The CD73 protein hydrolyzes extracellular nucleotides into nucleosides by removing phosphate groups. It is a 70 kDa glycosylphosphatidylinositol-anchored molecule found on the surface of various cell types including endothelial cells lymphocytes and epithelial cells. Its presence is noted in a wide range of tissues across the human body highlighting its versatile role in cellular communication and metabolism. |
| **Biological function summary** | CD73 participates in the regulation of purinergic signaling through adenosine production. It acts in cooperation with other cell surface enzymes such as CD39 forming a functional complex that handles ATP breakdown to adenosine. This enzymatic activity modulates immune responses tissue protection and inflammation control. In addition to immune-related functions CD73 supports the maintenance of vascular integrity and proper cellular adhesion which is important in different physiological and pathological contexts. |
| **Pathways** | CD73 plays an important part in the adenosinergic pathway governing the conversion of AMP into adenosine. This activity impacts the signaling and function of the adenosine receptors on immune and non-immune cells. Another important pathway is the angiogenesis process where CD73 contributes by affecting endothelial cell migration and blood vessel development. Relationships with key proteins such as adenosine A2 receptors help facilitate these critical pathway activities. |
| **Associated diseases and disorders** | CD73's involvement with immunosuppression and tumor progression becomes significant. Elevated levels of CD73 are frequently observed in some cancers where it aids in creating a favorable tumor microenvironment through increased adenosine production. This situation assists tumor cells in evading immune detection. Additionally CD73 is linked to autoimmune diseases like multiple sclerosis where it contributes to modulated lymphocyte activity. Connections with proteins such as TGF-beta further illustrate its role in disease-related pathways creating potential targets for therapeutic interventions through the use of anti-CD73 antibodies. |

## 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.

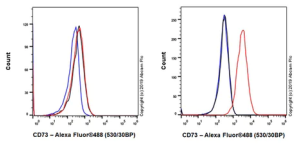
In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

---

## 2 product images

---

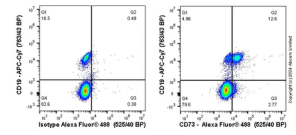


### Flow Cytometry - Anti-CD73 antibody [EPR23048-139] - BSA and Azide free (ab268024)

CD73 Flow Cytometry staining using rabbit Anti-CD73 antibody

Flow cytometric analysis of Raji (Human Burkitt's lymphoma B lymphocyte, Left) / SK-OV-3 (Human ovarian cancer epithelial cell, Right) cells labelling CD73 with ab227030 at 1/60 dilution (Red) compared with a Rabbit monoclonal IgG (ab172730) Black isotype control (Black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) at 1/2000 dilution was used as the secondary antibody.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab227030).

---



### Flow Cytometry - Anti-CD73 antibody [EPR23048-139] - BSA and Azide free (ab268024)

CD73 Flow Cytometry staining of Human peripheral blood mononuclear cells using rabbit Anti-CD73 antibody

This data was developed using ab227030, the same antibody clone in a different buffer formulation.

Flow cytometry staining of human peripheral blood mononuclear cells (PBMCs) with ab227030 (right) or Recombinant 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 ab227030 or Recombinant Rabbit IgG, monoclonal [EPR25A] - Isotype Control (1x $10^6$in 100 µl at 0.2 µg/ml (1/9800)) for 30min on ice. The cells were simultaneously stained with CD19.

The secondary antibody Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed was incubated at 1/4000 for 30min on ice

Acquisition of >30000 events were collected using a 50 mW Blue laser (488nm) and 525/40 bandpass filter. Events were gated on live cells.

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