abcam

ab310912

PE Anti-ENT1 antibody [SP120]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Conjugation	PE
Excitation/Emission	Ex: 480;565nm, Em: 578nm
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	SP120
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

Target Binding Affinity

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.

Notes	-

Antibody Labelling

Expected

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

Flow Cyt (Intra)

Expected

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

IHC-P

Expected

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

Target data

See full target information SLC29A1

Function	Uniporter involved in the facilitative transport of nucleosides and nucleobases, and contributes to maintaining their cellular homeostasis (PubMed:10722669, PubMed:10755314, PubMed:12527552, PubMed:14759222, PubMed:15037197, PubMed:17379602, PubMed:21795683, PubMed:26406980, PubMed:27995448, PubMed:35790189, PubMed:8986748). Functions as a Na(+)-independent transporter (PubMed:8986748). Involved in the transport of nucleosides such as adenosine, guanosine, inosine, uridine, thymidine and cytidine (PubMed:10722669, PubMed:10755314, PubMed:12527552, PubMed:14759222, PubMed:15037197, PubMed:17379602, PubMed:26406980, PubMed:8986748). Also transports purine nucleobases (hypoxanthine, adenine, guanine) and pyrimidine nucleobases (thymine, uracil) (PubMed:21795683, PubMed:27995448). Mediates

basolateral nucleoside uptake into Sertoli cells, thereby regulating the transport of nucleosides in testis across the blood-testis barrier (By similarity). Regulates inosine levels in brown adipocytes tissues (BAT) and extracellular inosine levels, which controls BAT-dependent energy expenditure (PubMed:35790189).

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

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.

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.

How are conjugated primary antibodies validated?
This conjugated primary antibody is released using a quantitative quality control method that evaluates binding affinity post-conjugation and efficiency of antibody labeling.
For suitable applications and species reactivity, please refer to the unconjugated version of this clone.

Supplementary info

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

Activity summary	ENT1 also known as Equilibrative Nucleoside Transporter 1 or SLC29A1 is a membrane protein responsible for transporting nucleosides across cell membranes. This protein weighs approximately 55 kDa and is expressed in various tissues including the brain heart and liver. The transport activity of ENT1 plays a fundamental role in maintaining cellular nucleoside levels. The efficient transport mechanisms of ENT1 highlight its significance in regulating the availability of substrates for nucleic acid synthesis.
Biological function summary	This transporter facilitates the uptake and recycling of nucleosides which are essential building blocks for DNA and RNA synthesis. ENT1 mediates the transport of adenosine an important nucleoside involved in multiple cellular functions. It operates as a component of a broader transport system that includes similar proteins like ENT2. This action contributes to cellular processes by controlling nucleoside concentrations impacting cell proliferation and metabolic activities.
Pathways	ENT1 plays a role in the purine salvage pathway and adenosine signaling. It regulates extracellular adenosine levels influencing adenosine receptor-mediated pathways that impact many physiological functions. ENT1 coordinates with proteins such as adenosine kinases to manage the intracellular balance of adenosine therefore integrating into both metabolic and signaling routes. Its role in these pathways affects energy metabolism and supports cellular responses to stress.
Associated diseases and disorders	ENT1 has been associated with conditions such as cardiovascular diseases and neurological disorders. Altered ENT1 activity can affect adenosine levels leading to variations in blood flow and neurotransmission. In cardiovascular diseases ENT1 modulates adenosine's cardioprotective effects. In neurological contexts dysfunction of ENT1 relates to disorders involving adenosine receptor signaling where its interaction with proteins like ADA (adenosine deaminase) can influence disease progression.

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.

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