abcam

ab174855

Anti-UAP1L1 antibody [EPR11586]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR11586
Purification technique	Affinity purification Protein A
Concentration	0.77 - 0.781 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Not recommended

Species	Human
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	1/1000 - 1/10000
Notes	-

IHC-P

Not recommended

Species	Human
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/50 - 1/100
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/100 - 1/500
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Target data

See full target information UDP-N-acetylhexosamine pyrophosphorylase-like protein 1

Storage

Shipped at conditions	Conditional Ambient
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
Storage information	Avoid freeze / thaw cycle

Notes

Species reactivity
Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

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	The target UAP1L1 also known as UDP-N-acetylglucosamine pyrophosphorylase 2 or AGX2 is an enzyme with a molecular weight of approximately 63 kDa. This enzyme is responsible for catalyzing the conversion of UTP and N-acetylglucosamine-1-phosphate to UDP-N-acetylglucosamine an essential precursor for glycosylation processes. UAP1L1 expression occurs in various tissues including the liver and skeletal muscle but it is notably higher in testis tissue. Its activity impacts the synthesis of N-glycans and glycolipids important components of cellular membranes.

Biological function summary	UAP1L1 plays a significant role in cellular glycosylation. This process involves the addition of sugar moieties to proteins and lipids which is vital for proper folding stability and function of glycoproteins. UAP1L1 is not part of any known large enzyme complexes but it cooperates closely with other metabolic enzymes to maintain the pool of UDP-GlcNAc a high-energy substrate used in various biosynthetic pathways. It influences cellular homeostasis by regulating glycan biosynthesis.
Pathways	UAP1L1 is integral to the hexosamine biosynthetic pathway and the UDP-N-acetylglucosamine biosynthesis pathway. Through its enzymatic activity it contributes to maintaining cellular UDP-GlcNAc levels which correlate with key biosynthetic and signaling pathways including O-GlcNAcylation. UAP1L1 interacts with other enzymes like GFAT and OGT in these pathways highlighting its interconnected role in cellular metabolism growth and signaling.
Associated diseases and disorders	Abnormal UAP1L1 function shows associations with metabolic and developmental disorders. Anomalies in hexosamine metabolism where UAP1L1 activity is important can lead to insulin resistance and contribute to the pathogenesis of type 2 diabetes. Alterations in glycosylation where UAP1L1 is a foundational player may also feature in congenital disorders of glycosylation. Proteins like OGT linked through pathways involving UAP1L1 dysregulation also relate to these diseases illustrating the interconnected nature of metabolic and glycosylation pathways in disease contexts.

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

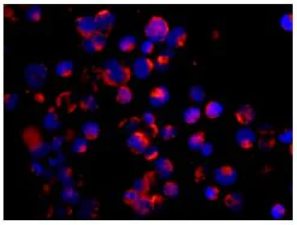
We do not recommend this combination. It is not covered by our product promise.

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.

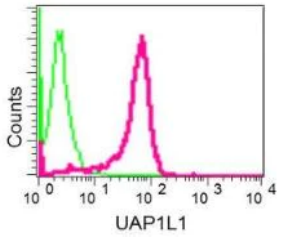
3 product images



Immunocytochemistry/ Immunofluorescence - Anti-UAP1L1 antibody [EPR11586] (ab174855)

UAP1L1 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-UAP1L1 antibody

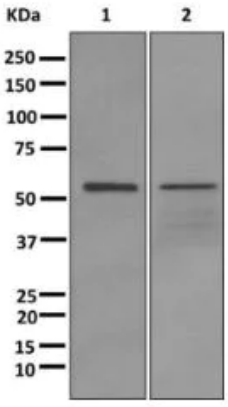
Immunofluorescent staining of K562 cells labeling UAP1L1 using ab174855 at 1/50 dilution (red). DAPI nuclear staining (blue).



Flow Cytometry (Intracellular) - Anti-UAP1L1 antibody [EPR11586] (ab174855)

UAP1L1 Flow Cytometry (Intracellular) staining using rabbit Anti-UAP1L1 antibody

Intracellular flow cytometric analysis of permeabilized K562 cells labeling UAP1L1 using ab174855 at 1/100 dilution (red) or a rabbit IgG (negative) (green).



Western blot - Anti-UAP1L1 antibody [EPR11586] (ab174855)

All lanes:
Western blot - Anti-UAP1L1 antibody [EPR11586] (ab174855) at 1/1000 dilution

Lane 1:
Caco 2 cell lysate at 10 µg

Lane 2:
K562 cell lysate at 10 µg

Predicted band size: 57 kDa

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