abcam

ab303502

Anti-Prealbumin (mutated V30M) antibody [EPR24341-111]

Recombinant | RabMAb | 20ul selling size

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	EPR24341-111
Purification technique	Affinity purification Protein A
Concentration	0.45 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Not recommended

Species	Human, Mouse, Rat, Transfected cell line - Human
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Transfected cell line - Human
Dilution info	1/500
Notes	-

Predicted

Species	Human
Dilution info	-
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

ICC/IF

Not recommended

Species	Human, Mouse, Rat, Transfected cell line - Human
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Human
Dilution info	-
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Species	Rat
Dilution info	-
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Species	Mouse
Dilution info	-
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Species	Transfected cell line - Human
Dilution info	-
Notes	-

WB

Tested

Species	Transfected cell line - Human
Dilution info	1/1000
Notes	-

Not recommended

Species	Mouse, Rat, Human
Dilution info	-
Notes	-

Target data

See full target information TTR V30M

Function	Thyroid hormone-binding protein. Probably transports thyroxine from the bloodstream to the brain.

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

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	Prealbumin also known as transthyretin is a protein with a molecular mass of approximately 55 kDa. The liver primarily synthesizes prealbumin and it is present in the bloodstream. Functionally prealbumin transports thyroxine and retinol-binding protein-retinol complex facilitating the distribution of these molecules to target tissues. As such it plays an integral role in maintaining retinol and thyroid hormone homeostasis.
Biological function summary	Prealbumin interacts with retinol-binding protein to form a complex essential for vitamin A transportation. This complex prevents renal filtration of retinol-binding protein thereby conserving vitamin A in circulation. The protein's role extends beyond transport as it influences neurophysiological processes due to its ability to bind thyroid hormones and affect gene expression related to metabolism. Prealbumin is primarily a part of the thyroxine-transferring complex reinforcing its critical position in hormonal and vitamin dynamics.

Pathways	Prealbumin's role in the thyroxine-binding globulin pathway highlights its importance in the endocrine system. Another pathway where prealbumin contributes significantly is the vitamin A metabolic pathway. In these pathways prealbumin maintains functional relationships with proteins like retinol-binding protein and thyroxine-binding globulin which jointly modulate thyroid hormone transport and vitamin A dynamics across cellular membranes.
Associated diseases and disorders	Prealbumin directly associates with familial amyloid polyneuropathy and malnutrition. Familial amyloid polyneuropathy involves the deposition of prealbumin-derived amyloid fibrils in peripheral nerves impacting neuron function. In malnutrition decreased prealbumin levels serve as a biomarker reflecting poor nutritional status. Clinically prealbumin's relation to retinol-binding protein and thyroid hormone levels facilitates its use in diagnosing and monitoring these conditions.

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

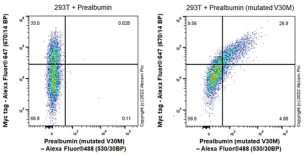
We do not recommend this combination. It is not covered by our product promise.

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.

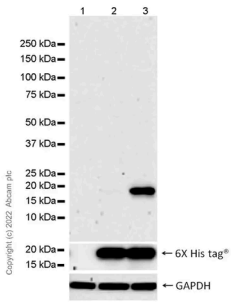
Full details and terms and conditions can be found here:
Terms & Conditions.

2 product images



Flow Cytometry (Intracellular) - Anti-Prealbumin (mutated V30M) antibody [EPR24341-111] (ab303502)

Flow cytometric (Intracellular) analysis of 4% paraformaldehyde fixed 90% methanol permeabilized HEK-293T (human embryonic kidney) cells transfected with a human Prealbumin expression vector containing a myc-his tag (Left panel) compared to HEK-293T transfected with a human Prealbumin (mutated V30M) expression vector containing a myc-his tag (Right panel) cells labeling Prealbumin (mutated V30M) with ab303502 at 1/500 dilution (0.1ug). A Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/2000 dilution was used as the secondary antibody.



Western blot - Anti-Prealbumin (mutated V30M) antibody [EPR24341-111] (ab303502)

Buffer/dilution concentration: 5% NFDM/TBST Exposure time: 3 minutes This blot was developed using ECL substrate
All lanes:
Western blot - Anti-Prealbumin (mutated V30M) antibody [EPR24341-111] (ab303502) at 1/1000 dilution

Lane 1:
HEK-293T transfected with an empty vector (vector control), containing a myc-His-tag®, whole cell lysate at 20 µg

Lane 2:
HEK-293T transfected with human Prealbumin, containing a myc-His-tag®, whole cell lysate at 20 µg

Lane 3:
HEK-293T transfected with human Prealbumin (mutated V30M), containing a myc-His-tag®, whole cell lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Developed using the ECL technique.

Observed band size: 15 kDa

Exposure time: 3min

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