abcam

ab185127

# Anti-Prealbumin antibody [EP2929Y] - 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** | EP2929Y |
| **Purification technique** | Affinity purification Protein A |
| **Concentration** | 1.028 mg/mL The concentration of this product may be batch-dependent<br>Batch concentration finder → |

## Reactivity data

### IHC-P

**Tested**

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

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

### Not recommended

| | |
|---|---|
| **Species** | Mouse |
| **Dilution info** | - |
| **Notes** | - |

## IP

### Tested

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

### Not recommended

| | |
|---|---|
| **Species** | Mouse |
| **Dilution info** | - |
| **Notes** | - |

## WB

### Tested

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

### Not recommended

| | |
|---|---|
| **Species** | Mouse |
| **Dilution info** | - |
| **Notes** | - |

## Flow Cyt (Intra)

### Tested

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | - |
| **Notes** | ab199376 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody. |

### Not recommended

| | |
|---|---|
| **Species** | Mouse |
| **Dilution info** | - |
| **Notes** | - |

## Target data

See full target information TTR

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

## 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

ab185127 is the carrier-free version of ab75815.

**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.

**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** | 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**

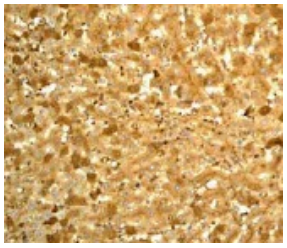
We do not recommend this combination. It is not covered by our product promise.

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.

## 4 product images

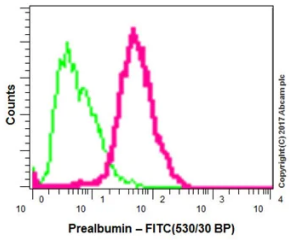


## Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Prealbumin antibody [EP2929Y] - BSA and Azide free (ab185127)

Prealbumin Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Prealbumin antibody

ab75815 at 1/250 dilution staining Prealbumin in human liver by Immunohistochemistry, Paraffin-embedded tissue.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab75815).

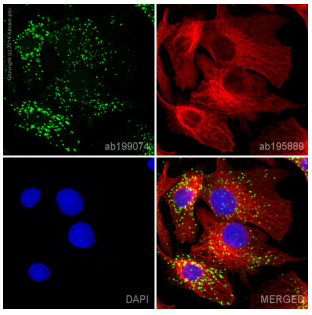
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.




## Flow Cytometry (Intracellular) - Anti-Prealbumin antibody [EP2929Y] - BSA and Azide free (ab185127)

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

Intracellular Flow Cytometry analysis of HepG2 cells labelling Prealbumin with ab75815 at a dilution of 1/50 (red). Cells were fixed with 2% paraformaldehyde. A FITC-conjugated goat anti-rabbit IgG (1/150) was used as the secondary antibody. Green - Isotype control, rabbit monoclonal IgG.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab75815).

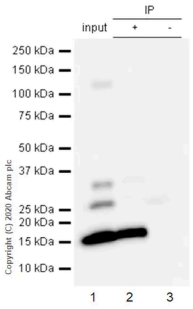



## Immunocytochemistry/ Immunofluorescence - Anti-Prealbumin antibody [EP2929Y] - BSA and Azide free (ab185127)

Prealbumin Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Prealbumin antibody

Clone EP2929Y (ab185127) has been successfully conjugated by Abcam. This image was generated using Anti-Prealbumin antibody [EP2929Y] (Alexa Fluor® 488). Please refer to ab199074 for protocol details.
ab199074 staining Prealbumin in HepG2 cells. The cells were fixed with 4% formaldehyde (10 min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at +4°C with ab199074 at a 1/100 dilution (shown in green) and ab195889, Mouse monoclonal to alpha Tubulin (Alexa Fluor® 594), at a 1/250 dilution (shown in red). Nuclear DNA was labelled with DAPI (shown in blue).

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).




# Immunoprecipitation - Anti-Prealbumin antibody [EP2929Y] - BSA and Azide free (ab185127)

This data was developed using ab75815, the same antibody clone in a different buffer formulation.
Purified ab75815 at 1/50 dilution (2µg) immunoprecipitating Prealbumin in Human heart lysate.
Lane 1 (input): Human heart lysate 10µg
Lane 2 (+): ab75815 + Human heart lysate.
Lane 3 (-): Rabbit monoclonal IgG (ab172730) instead of ab75815 in Human heart lysate.
VeriBlot for IP Detection Reagent (HRP) (ab131366) (1/1000 dilution) was used for Western blotting.
Blocking Buffer and concentration: 5% NFDM/TBST.
Diluting buffer and concentration: 5% NFDM/TBST.
Observed band size: 16 kDa
All lanes:
Immunoprecipitation - Anti-Prealbumin antibody [EP2929Y] (ab75815)

Predicted band size: 15 kDa

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