

Product datasheet

Anti-Prealbumin antibody [2E10C5] ab204997

6 Images

Overview

Product name	Anti-Prealbumin antibody [2E10C5]
Description	Mouse monoclonal [2E10C5] to Prealbumin
Host species	Mouse
Tested applications	Suitable for: Flow Cyt, ICC/IF, IHC-P, WB
Species reactivity	Reacts with: Human Predicted to work with: Cow
Immunogen	<p>Recombinant full length protein corresponding to Human Prealbumin aa 1-147. Expressed in E coli.</p> <p>Sequence:</p> <p>MASHRLLLLC LAGLVFVSEA GPTGTGESKC PLMVKVLDVAV RGSPAINVAV HVFRKAADDT WEPFASGKTS ESGELHGLTT EEEFVEGYK VEIDTKSYWK ALGISPFHEH AEVVFTANDS GPRRYTIAAL LSPYSYSTTA VVTNPKE</p> <p>Database link: P02766</p> <p style="text-align: right;"> Run BLAST with Run BLAST with</p>
Positive control	Human Prealbumin (aa1-147) recombinant protein, Prealbumin (aa1-147)-hlgGfc transfected HEK293 whole cell lysate, A549 or MCF-7 cells, Human liver cancer tissue.
General notes	<p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.</p> <p>In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.</p> <p>We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.</p> <p>Applications & species from publications and Abreviews that have not been tested in our own</p>

labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&As.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.05% Sodium azide Constituent: 99% PBS
Purity	Protein G purified
Purification notes	Purified from tissue culture supernatant.
Clonality	Monoclonal
Clone number	2E10C5
Isotype	IgG1

Applications

Our [Abpromise guarantee](#) covers the use of **ab204997** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt		1/200 - 1/400.
ICC/IF		1/200 - 1/1000.
IHC-P		1/200 - 1/1000.
WB		1/500 - 1/2000. Predicted molecular weight: 16 kDa.

Target

Function	Thyroid hormone-binding protein. Probably transports thyroxine from the bloodstream to the brain.
Tissue specificity	Detected in serum and cerebrospinal fluid (at protein level). Highly expressed in choroid plexus epithelial cells. Detected in retina pigment epithelium and liver.
Involvement in disease	Defects in TTR are the cause of amyloidosis transthyretin-related (AMYL-TTR) [MIM:105210]. A hereditary generalized amyloidosis due to transthyretin amyloid deposition. Protein fibrils can form in different tissues leading to amyloid polyneuropathies, amyloidotic cardiomyopathy, carpal tunnel syndrome, systemic senile amyloidosis. The disease includes leptomeningeal amyloidosis that is characterized by primary involvement of the central nervous system. Neuropathologic examination shows amyloid in the walls of leptomeningeal vessels, in pia arachnoid, and subpial

deposits. Some patients also develop vitreous amyloid deposition that leads to visual impairment (oculoleptomeningeal amyloidosis). Clinical features include seizures, stroke-like episodes, dementia, psychomotor deterioration, variable amyloid deposition in the vitreous humor. Defects in TTR are a cause of hyperthyroxinemia dystransthyretinemic euthyroidal (HTDE) [MIM:145680]. It is a condition characterized by elevation of total and free thyroxine in healthy, euthyroid persons without detectable binding protein abnormalities.

Defects in TTR are a cause of carpal tunnel syndrome type 1 (CTS1) [MIM:115430]. It is a condition characterized by entrapment of the median nerve within the carpal tunnel. Symptoms include burning pain and paresthesias involving the ventral surface of the hand and fingers which may radiate proximally. Impairment of sensation in the distribution of the median nerve and thenar muscle atrophy may occur. This condition may be associated with repetitive occupational trauma, wrist injuries, amyloid neuropathies, rheumatoid arthritis.

Sequence similarities

Belongs to the transthyretin family.

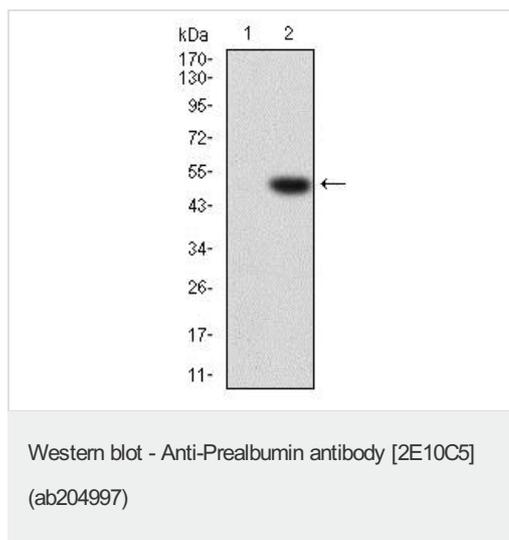
Domain

Each monomer has two 4-stranded beta sheets and the shape of a prolate ellipsoid. Antiparallel beta-sheet interactions link monomers into dimers. A short loop from each monomer forms the main dimer-dimer interaction. These two pairs of loops separate the opposed, convex beta-sheets of the dimers to form an internal channel.

Cellular localization

Secreted. Cytoplasm.

Images

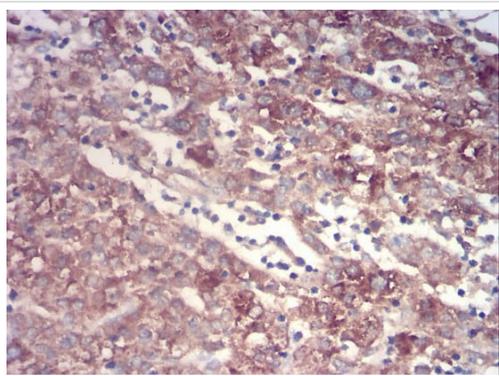


All lanes : Anti-Prealbumin antibody [2E10C5] (ab204997) at 1/500 dilution

Lane 1 : HEK293 whole cell lysate

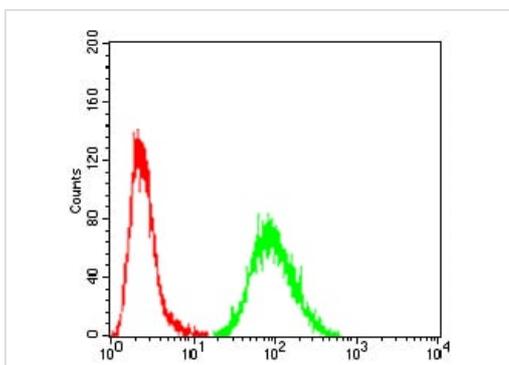
Lane 2 : Prealbumin (aa1-147)-hlgGFc transfected HEK293 whole cell lysate

Predicted band size: 16 kDa



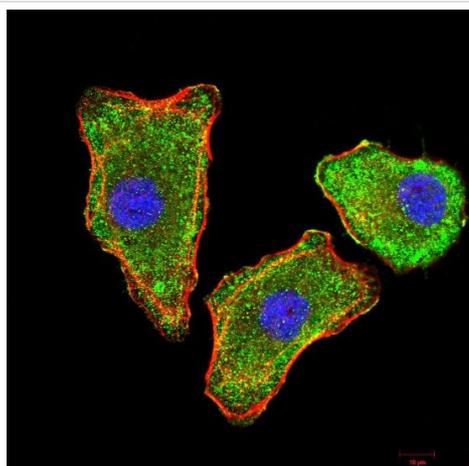
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Prealbumin antibody [2E10C5] (ab204997)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded section) analysis of Human liver cancer tissue labeling Prealbumin with ab204997 at a 1/200 dilution. DAB staining used.



Flow Cytometry - Anti-Prealbumin antibody [2E10C5] (ab204997)

Flow cytometric analysis of A549 cells labelling Prealbumin with ab204997 (green) at a 1/200 dilution and negative control (red).



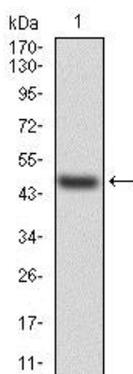
Immunocytochemistry/ Immunofluorescence - Anti-Prealbumin antibody [2E10C5] (ab204997)

Immunofluorescence analysis of MCF-7 cells labeling Prealbumin with ab204997 at a 1/200 dilution (green), followed by Alexa Fluor[®] 555 phalloidin (red). Nuclear counterstain DRAQ5 fluorescent DNA dye used (blue).



Immunocytochemistry/ Immunofluorescence - Anti-Prealbumin antibody [2E10C5] (ab204997)

Immunofluorescence analysis of A549 cells labeling Prealbumin with ab204997 at a 1/200 dilution (green), followed by Alexa Fluor[®] 555 phalloidin (red). Nuclear counterstain DRAQ5 fluorescent DNA dye used (blue).



Western blot - Anti-Prealbumin antibody [2E10C5] (ab204997)

Anti-Prealbumin antibody [2E10C5] (ab204997) at 1/500 dilution + Human Prealbumin (aa1-147) recombinant protein

Predicted band size: 16 kDa

Additional bands at: 45.8 kDa. We are unsure as to the identity of these extra bands.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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