abcam

Product datasheet

Recombinant Human Prealbumin protein (Tagged) ab267993

Description

Product name Recombinant Human Prealbumin protein (Tagged)

Purity > 85 % SDS-PAGE.

Expression system Mammalian

Accession P02766

Protein length Full length protein

Animal free No

Nature Recombinant

Species Human

Sequence GPTGTGESKCPLMVKVLDAVRGSPAINVAVHVFRKAADD

TWEPFASGKTS

ESGELHGLTTEEEFVEGIYKVEIDTKSYWKALGISPFHEHA

EVVFTANDS GPRRYTIAALLSPYSYSTTAVVTNPKE

Predicted molecular weight 15 kDa

Amino acids 21 to 147

Tags Fc tag C-Terminus

Additional sequence information Mature chain with C-terminal FC-Myc-tag.

Specifications

Our <u>Abpromise guarantee</u> covers the use of ab267993 in the following tested applications.

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

Applications SDS-PAGE

Form Liquid

Preparation and Storage

Stability and Storage Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

pH: 7.2

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Constituents: PBS, 6% Trehalose

Lyophilized from.

General Info

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.

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