

Rabbit Anti-TTR/Prealbumin antibody

SL41140R

Product Name TTR/Prealbumin

Chinese Name 转甲状腺素蛋白/前白蛋白抗体

Alias Transthyretin; Amyloid polyneuropathy; Amyloidosis I; ATTR; Dysprealbuminemic euthyroidal hyperthyroxinemia; Dystransthyretinemic hyperthyroxinemia; HsT2651; PALB; Prealbumin amyloidosis type I; Senile systemic amyloidosis; TBPA; Transthyretin; TTR; TTR protein; prealbumin; TTHY_HUMAN.

Research Area Growth factors and hormones Transporter

Immunogen Species Rabbit

Clonality Polyclonal

React Species Human,Mouse,Rat

Applications WB=1:500-2000 (Paraffin sections need antigen repair)
not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.

Theoretical molecular weight 14kDa

Cellular localization cytoplasmic Secretory protein

Form Liquid

Concentration 1mg/ml

immunogen Recombinant human TTR protein

Lsotype IgG

Purification affinity purified by Protein A

Buffer Solution 1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.

Storage Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

Attention This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

PubMed [PubMed](#)

Transthyretin (TTR) is a transport protein in the serum and cerebrospinal fluid that carries the thyroid hormone thyroxine (T4) and retinol-binding protein bound to retinol. This is how transthyretin gained its name: transports thyroxine and retinol. The liver secretes transthyretin into the blood, and the choroid plexus secretes TTR into the cerebrospinal fluid.

TTR was originally called prealbumin (or thyroxine-binding prealbumin) because it ran faster than albumin on electrophoresis gels.

Function:

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

Subunit:

Homotetramer. Dimer of dimers. In the homotetramer, subunits assemble around a central channel that can accommodate two ligand molecules. Interacts with RBP4.

Subcellular Location:

Secreted. Cytoplasm.

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.

**Product
Detail**

Post-translational modifications:

Not glycosylated under normal conditions. Following unfolding, caused for example by variant AMYL-TTR 'Gly-38', the cryptic Asn-118 site is exposed and glycosylated by STT3B-containing OST complex, leading to its degradation by the ER-associated degradation (ERAD) pathway.

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.

Similarity:

Belongs to the transthyretin family.

SWISS:

P02766

Gene ID:

7276

Database links:

[Entrez Gene: 7276](#) Human

[Entrez Gene: 22139](#) Mouse

[Entrez Gene: 24856](#) Rat

[Omim: 176300](#) Human

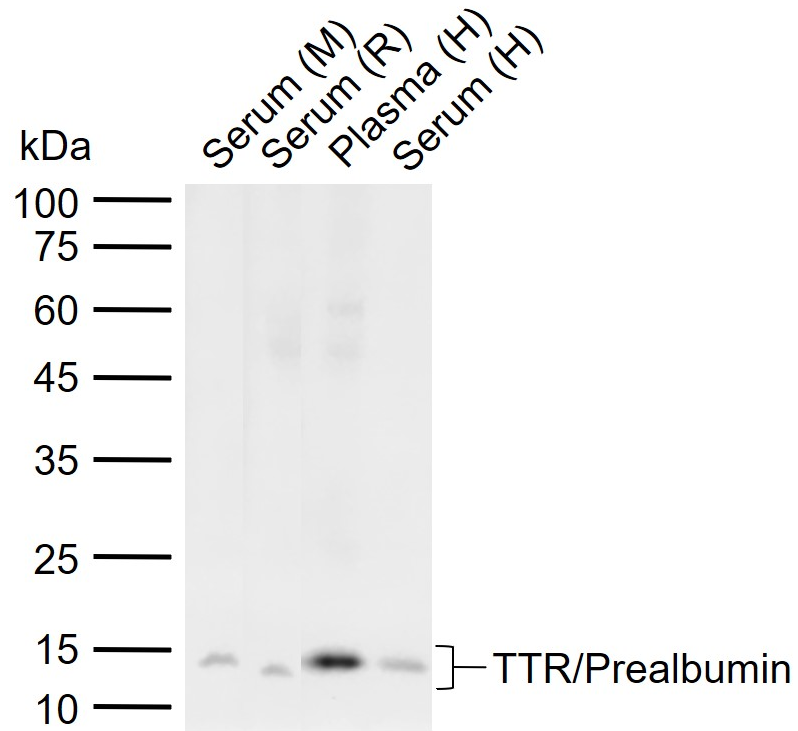
[SwissProt: P27731](#) Chicken

[SwissProt: O46375](#) Cow

[SwissProt: P02766](#) Human

[SwissProt: P07309](#) Mouse

**Product
Picture**



Sample:

Lane 1: Mouse Serum

Lane 2: Rat Serum

Lane 3: Human Plasma

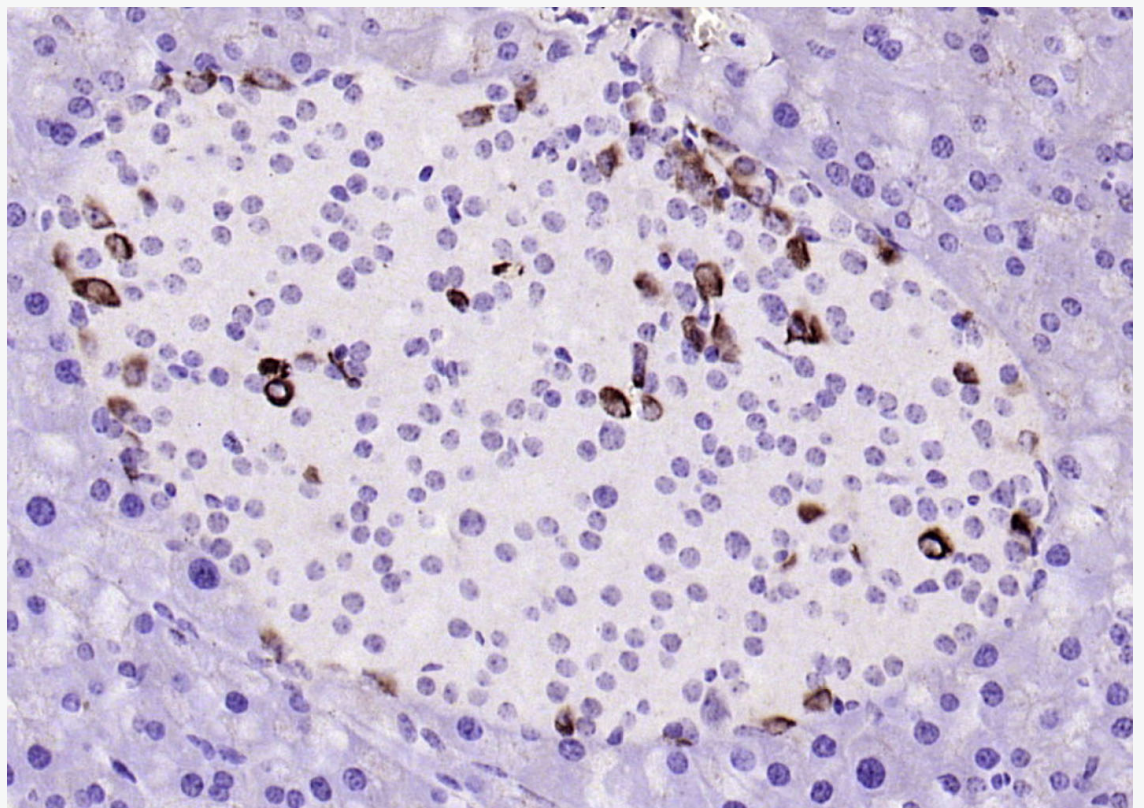
Lane 4: Human Serum

Primary: Anti-TTR/Prealbumin (SL41140R) at 1/1000 dilution

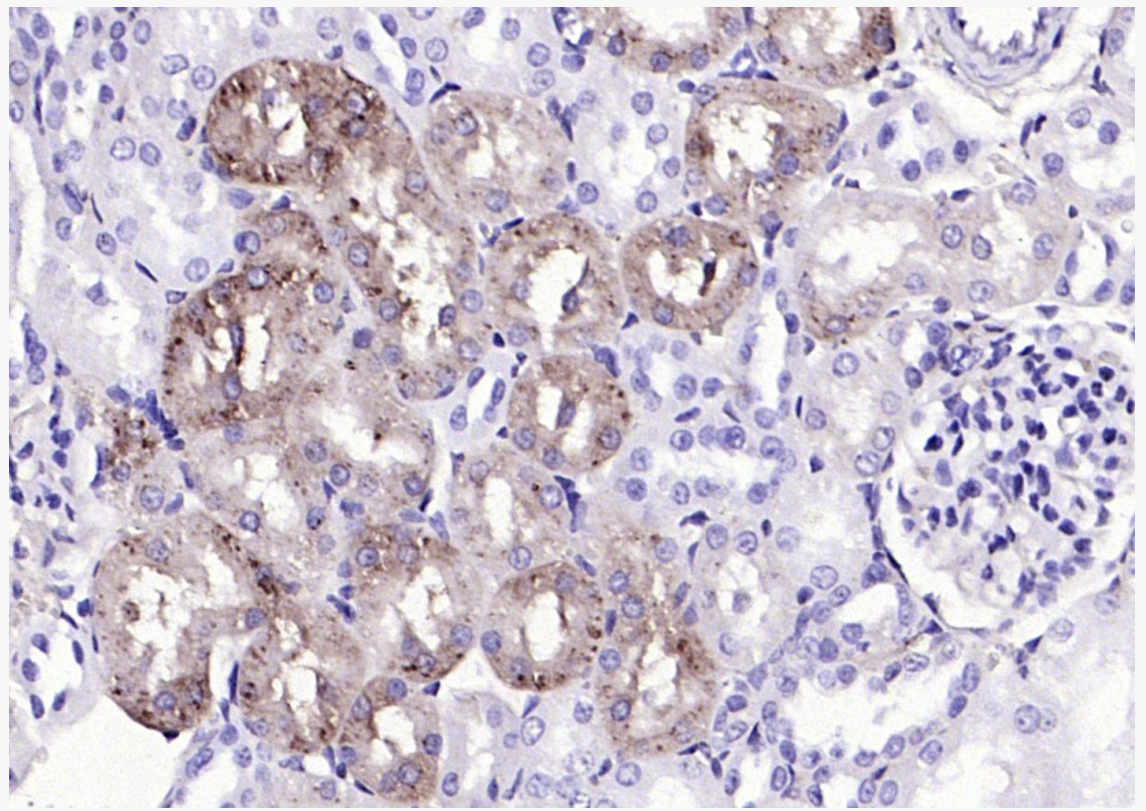
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 14 kDa

Observed band size: 14 kDa



Paraformaldehyde-fixed, paraffin embedded (rat pancreas); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (TTR) Polyclonal Antibody, Unconjugated (SL41140R) at 1:2000 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (rat kidney); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (TTR) Polyclonal Antibody, Unconjugated (SL41140R) at 1:2000 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.