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Rabbit Anti-TTR/Prealbumin antibody

SL0152R

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.
文献引用 PubMed :	**Specific References(4)**|SL0152R has been referenced in 4 publications. **[IF=2.91]**Liu, Qian, et al. "Proteomic Study on Usnic Acid-induced Hepatotoxicity in Rats." Journal of agricultural and food chemistry (2012).**WB;Rat**. PubMed:22758371 **[IF=4.10]**Herrick-Davis, Katharine, et al. "Native Serotonin 5-HT2C Receptors are Expressed as Homodimers on the Apical Surface of Choroid Plexus Epithelial Cells." Molecular Pharmacology (2015): mol-114.**Rat**. PubMed:25609374 **[IF=2.14]**Dai, Keqiang, et al. "Induction of Functional Hepatocyte-Like Cells by Overexpression of FOXA3 and HNF4α in Rat Bone Marrow Mesenchymal Stem Cells." Cells Tissues Organs (2015).**WB;Rat**. PubMed:25896100 **[IF=1.75]**Ding, Yi, et al. "Overexpression of transcription factor Foxa2 and Hnf1α induced rat bone mesenchymal stem cells into hepatocytes."Cytotechnology (2016): 1-11.**WB;Rat**. PubMed:26797779
Organism Species:	Rabbit

Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	14kDa
Cellular localization:	cytoplasmicSecretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Transthyretin:51-147/147
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	This gene encodes transthyretin, one of the three prealbumins including alpha-1-antitrypsin, transthyretin and orosomucoid. Transthyretin is a carrier protein; it transports thyroid hormones in the plasma and cerebrospinal fluid, and also transports retinol (vitamin A) in the plasma. The protein consists of a tetramer of identical subunits. More than 80 different mutations in this gene have been reported; most mutations are related to amyloid deposition, affecting predominantly peripheral nerve and/or the heart, and a small portion of the gene mutations is non-amyloidogenic. The diseases caused by mutations include amyloidotic polyneuropathy, euthyroid hyperthyroxinaemia, amyloidotic vitreous opacities, cardiomyopathy, oculoleptomeningeal amyloidosis, meningocerebrovascular amyloidosis, carpal tunnel syndrome, etc. [provided by RefSeq] **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.

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 eneralized 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:
P07309

Gene ID:
7276

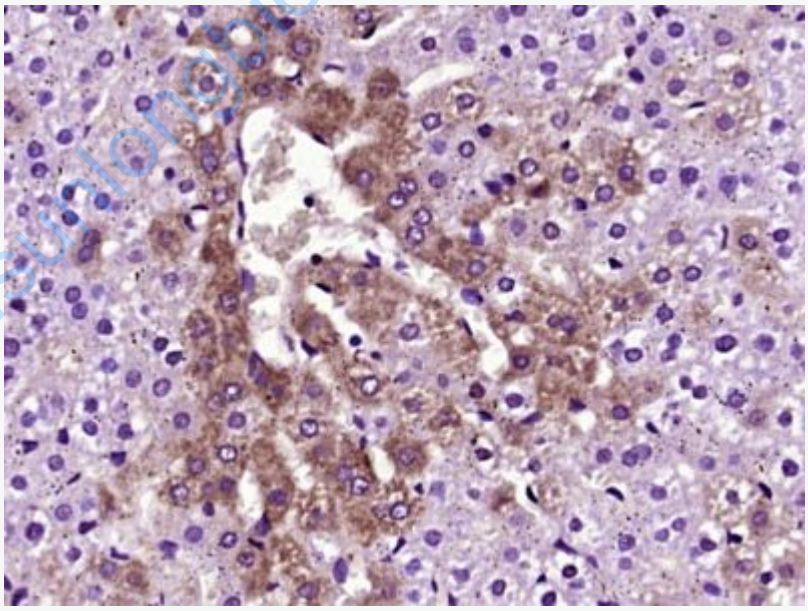
Database links:

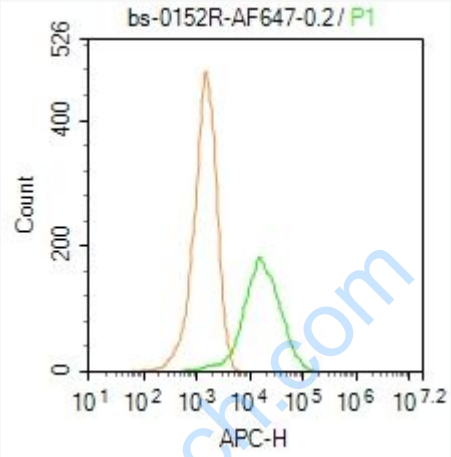
Entrez Gene: 7276Human

Entrez Gene: 22139Mouse

Entrez Gene: 24856Rat

Omim: 176300Human

	SwissProt: P27731Chicken SwissProt: O46375Cow SwissProt: P02766Human SwissProt: P07309Mouse **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. 转甲状腺素(transthyretin，TTR)蛋白由127个氨基酸组成，在生理条件下4个TTR蛋白单体分子结合一个T4单体分子形成聚合体，存在于血液中参与甲状腺素的转运。TTR蛋白基因发生遗传性突变以及在其他因素作用下TTR蛋白聚合体不稳定，容易分离形成单体。立体结构发生变化的TTR单体，进一步重合形成蛋白纤维沉积于全身组织、脏器的细胞间质，引起末梢神经、自主神经感觉障碍以及全身症状为特征的综合临床症状，称为家族性多发性神经性损害(familial amyloidotic polyneuropathy，FAP)。
Picture:	 Paraformaldehyde-fixed, paraffin embedded (Rat liver); 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 Prealbumin) Polyclonal Antibody,

	Unconjugated (SL0152R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.
	 Blank control: Mouse spleen. Primary Antibody (green line): Rabbit Anti-TTR/Prealbumin /AF647 Conjugated antibody (SL0152R) Dilution: 0.2μg /10^6 cells; Isotype Control Antibody (orange line): Rabbit IgG-AF647 . Protocol The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 0.1% PBST for 20 min at-20℃. The cells were then incubated in 5% BSA to block non-specific protein-protein interactions for 30 min at room temperature. The cells were stained with Primary Antibody for 30 min at room temperature. Acquisition of 20,000 events was performed.