Recombinant Human Transthyretin/ATTR

Catalog No: C545

Description	Recombinant Human Transthyretin is produced by our Mammalian expression system and the target gene encoding Gly21-Glu147 is expressed with a 6His tag at the C-terminus.
Source	Human Cells
Alternative name	Transthyretin; ATTR; Prealbumin; TBPA; TTR; PALB
Accession No.	P02766
Predicted Molecular Weight	14.8kDa
AP Molecular Weight	17kDa, reducing conditions.
Formulation	Lyophilized from a 0.2 μm filtered solution of 20mM TrisHCl, 150mM NaCl, pH 8.0.
Reconstitution	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100μg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.
Quality Control	Purity: Greater than 95% as determined by reducing SDS-PAGE. Endotoxin: Less than 0.1 ng/μg (1 IEU/μg) as determined by LAL test.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
Storage	Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Background	Transthyretin is a secreted and cytoplasm protein which belongs to the Transthyretin family. Transthyretin is detected in serum and cerebrospinal fluid (at protein level). It is highly expressed in choroid plexus epithelial cells. It is also detected in retina pigment epithelium and liver. Each monomer of Transthyretin 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. BACKGROUND These two pairs of loops separate the opposed, convex beta-sheets of the dimers to form an internal channel. Defects in Transthyretin are the cause of amyloidosis type 1 (AMYL1) which is 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.
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