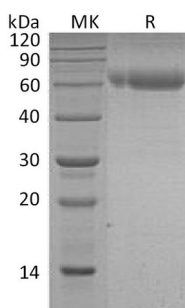


Summary

Name	Serpin A7/TBG
Purity	Greater than 95% as determined by reducing SDS-PAGE
Endotoxin level	<1 EU/μg as determined by LAL test.
Construction	Recombinant Human Serine Protease Inhibitor-clade A7 is produced by our Mammalian expression system and the target gene encoding Ala21-Ala415 is expressed with a 6His tag at the C-terminus.
Accession #	P05543
Host	Human Cells
Species	Human
Predicted Molecular Mass	49.9 KDa
Formulation	Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
Stability&Storage	Store at ≤-70°C, stable for 6 months after receipt. Store at ≤-70°C, stable for 3 months under sterile conditions after opening. Please minimize freeze-thaw cycles.
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.

SDS-PAGE image



Background

Product Name: Recombinant Human Serpin A7 (C-6His)
Catalog #: PHH2110



Alternative Names

Thyroxine-Binding Globulin; Serpin A7; T4-Binding Globulin; SERPINA7; TBG

Background

Serpin A7 is a secreted protein which belongs to the Serpin family. As a 54 kDa protein, Serpin A7 is synthesized primarily in the liver and secreted in plasma. Genomically, Serpin A7 is a serpin, although it has no inhibitory function like many other members of this class of proteins. Serpin A7 binds thyroid hormone in circulation. It is one of three proteins (along with transthyretin and albumin) responsible for carrying the thyroid hormones thyroxine (T4) and 3,5,3' - triiodothyronine (T3) in the bloodstream. Of these three proteins, Serpin A7 has the highest affinity for T4 and T3, but is present in the lowest concentration. Despite its low concentration, Serpin A7 carries the majority of T4 in serum. Due to the very low serum concentration of T4 and T3 in the blood, Serpin A7 is rarely more than 25% saturated with its ligand. Unlike transthyretin and albumin, Serpin A7 has a single binding site for T4/T3. Serpin A7 tests are sometimes used in finding the reason for elevated or diminished levels of thyroid hormone, and defects in Serpin A7 are a cause of Serpin A7 deficiency.

Note

For Research Use Only , Not for Diagnostic Use.