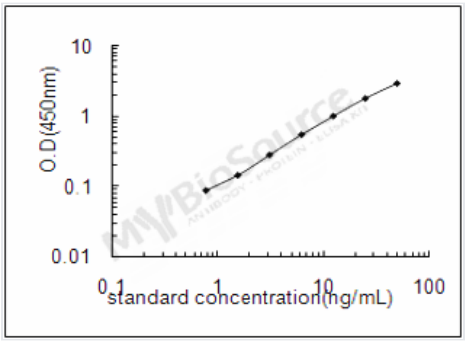
Thyroxine-Binding Globulin (SERPINA7) ELISA Kit for Human

PRODUCT OVERVIEW

Product Name	Thyroxine-binding globulin (SERPINA7), ELISA Kit
Full Product Name	Human Thyroxine-binding globulin ELISA Kit
Product Gene Name	SERPINA7 elisa kit
Product Synonym Names	Thyroxine-binding globulin; Serpin A7; T4-binding globulin; SERPINA7; TBG
Species Reactivity	Human
Assay Type	Sandwich
Detection Range	0.78-50 ng/mL
Sensitivity	0.33ng/mL
Preparation and Storage	For long term storage, please store the entire kit at -20 degree C.
Molecular Weight	46,325 Da
OMIM	314200
3D Structure	ModBase 3D Structure for P05543
Intra-Assay CV	<=3.8%
Inter-Assay CV	<=6.5%
Recovery	105%
Related Product Information for SERPINA7 elisa kit	MBS2882393 is a ready-to-use microwell, strip plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the Thyroxine-binding globulin (SERPINA7) ELISA Kit target analytes in biological samples. The concentration gradients of the kit standards or positive controls render a theoretical kit detection range in biological research samples containing SERPINA7. The ELISA analytical biochemical technique of the MBS2882393 kit is based on SERPINA7 antibody-SERPINA7 antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect SERPINA7 antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, SERPINA7. Appropriate sample types may include undiluted body fluids and/or tissue homogenates, secretions. Quality control assays assessing reproducibility identified the intra-assay CV (%) and inter-assay CV(%).
Other Notes	Small volumes of SERPINA7 elisa kit vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.



Typical Testing Data/Standard Curve (for reference only) of SERPINA7 elisa kit

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for SERPINA7. It may not necessarily be applicable to this product.

NCBI GI #	205277441
NCBI GeneID	6906
NCBI Accession #	NP_000345.2
UniProt Primary Accession #	P05543
UniProt Secondary Accession #	D3DUX1
UniProt Related Accession #	P05543
GenBank Nucleotide #	NM_000354.5
NCBI Official Full Name	thyroxine-binding globulin
NCBI Official Synonym Full Names	serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 7
NCBI Official Symbol	SERPINA7
NCBI Official Synonym Symbols	TBG
UniProt Protein Name	Thyroxine-binding globulin
UniProt Synonym Protein Names	Serpin A7; T4-binding globulin
Protein Family	Thyroxine-binding globulin
UniProt Gene Name	SERPINA7
UniProt Synonym Gene Names	TBG
UniProt Entry Name	THBG_HUMAN
NCBI Protein Information	thyroxine-binding globulin
NCBI Summary for SERPINA7	There are three proteins including thyroxine-binding globulin (TBG), transthyretin and albumin responsible for carrying the thyroid hormones thyroxine (T4) and 3,5,3'-triiodothyronine (T3) in the bloodstream. This gene encodes the major thyroid hormone transport protein, TBG, in serum. It belongs to the serpin family in genomics, but the protein has no inhibitory function like many other members of the serpin family. Mutations in this gene result in TGB deficiency, which has been classified as partial deficiency, complete deficiency, and excess, based on the level of serum TBG. Alternatively spliced transcript variants encoding different isoforms have been found, but the full-length nature of these variants has not been determined.[provided by RefSeq, Jun 2012]
UniProt Comments for SERPINA7	SERPINA7: Major thyroid hormone transport protein in serum. Defects in SERPINA7 are a cause of thyroxine-binding globulin deficiency (TBG deficiency). Mutations in the SERPINA7 gene can result as a whole spectrum of deficiencies, characterized by either reduced or increased TBG levels in the serum. Patients show, respectively, reduced or elevated protein- bound iodine but are euthyroid. Belongs to the serpin family. Protein type: Secreted; Secreted, signal peptide Chromosomal Location of Human Ortholog: Xq22.2 Cellular Component: extracellular region; extracellular space Molecular Function: serine-type endopeptidase inhibitor activity
Research Articles on SERPINA7	**1.** mutation in a liver-specific enhancer region of the TBG gene caused inherited TBG deficiency. To our knowledge, the present study is the first report of an inherited endocrine disorder caused by a mutation in an enhancer region.
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