# Thyroglobulin (TG) ELISA Kit for Duck

## PRODUCT OVERVIEW

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| **Product Name** | Thyroglobulin (TG), ELISA Kit |
| **Full Product Name** | Duck Thyroglobulin ELISA Kit |
| **Product Gene Name** | TG elisa kit |
| **Species Reactivity** | Duck |
| **Preparation and Storage** | Store all reagents at 2-8 degree C |
| **Molecular Weight** | 304,790 Da |
| **Chromosome Location** | Chromosome: 8; NC_000008.10 (133879205..134147143). Location: 8q24 |
| **OMIM** | 188450 |
| **3D Structure** | ModBase 3D Structure for P01266 |
| **Related Product Information for TG elisa kit** | MBS055950 is a ready-to-use microwell, strip-or-full plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the Thyroglobulin (TG) 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 TG. The ELISA analytical biochemical technique of the MBS055950 kit is based on TG antibody-TG antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect TG antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, TG. 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 TG 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. |

## ADDITIONAL DETAILS

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

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| **NCBI GI #** | 55770862 |
| **NCBI GeneID** | 7038 |
| **NCBI Accession #** | NP_003226.4 |
| **UniProt Primary Accession #** | P01266 |
| **UniProt Secondary Accession #** | O15274; O43899; Q15593; Q15948; Q9NYR1; Q9NYR2; Q9UMZ0; Q9UNY3 |
| **UniProt Related Accession #** | P01266 |
| **GenBank Nucleotide #** | NM_003235.4 |
| **NCBI Official Full Name** | thyroglobulin |
| **NCBI Official Synonym Full Names** | thyroglobulin |
| **NCBI Official Symbol** | TG |
| **NCBI Official Synonym Symbols** | TGN; AITD3 |
| **UniProt Protein Name** | Thyroglobulin |
| **Protein Family** | Thyroglobulin |

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| **UniProt Gene Name** | TG |
| **UniProt Synonym Gene Names** | Tg |
| **UniProt Entry Name** | THYG_HUMAN |
| **NCBI Protein Information** | thyroglobulin |
| **NCBI Summary for TG** | Thyroglobulin (Tg) is a glycoprotein homodimer produced predominantly by the thryroid gland. It acts as a substrate for the synthesis of thyroxine and triiodothyronine as well as the storage of the inactive forms of thyroid hormone and iodine. Thyroglobulin is secreted from the endoplasmic reticulum to its site of iodination, and subsequent thyroxine biosynthesis, in the follicular lumen. Mutations in this gene cause thyroid dyshormonogenesis, manifested as goiter, and are associated with moderate to severe congenital hypothyroidism. Polymorphisms in this gene are associated with susceptibility to autoimmune thyroid diseases (AITD) such as Graves disease and Hashimoto thryoiditis. [provided by RefSeq, Nov 2009] |
| **UniProt Comments for TG** | TG: Precursor of the iodinated thyroid hormones thyroxine (T4) and triiodothyronine (T3). Defects in TG are the cause of thyroid dyshormonogenesis 3 (TDH3). A disorder due to thyroid dyshormonogenesis, causing large goiters of elastic and soft consistency in the majority of patients. Although the degree of thyroid dysfunction varies considerably among patients with defective thyroglobulin synthesis, patients usually have a relatively high serum free triiodothyronine (T3) concentration with disproportionately low free tetraiodothyronine (T4) level. The maintenance of relatively high free T3 levels prevents profound tissue hypothyroidism except in brain and pituitary, which are dependent on T4 supply, resulting in neurologic and intellectual defects in some cases. Variations in TG are associated with susceptibility to autoimmune thyroid disease type 3 (AITD3). AITDs including Graves disease (GD) and Hashimoto thyroiditis (HT), are among the most common human autoimmune diseases. They are complex diseases, which are caused by an interaction between susceptibility genes and nongenetic factors, such as infection. Belongs to the type-B carboxylesterase/lipase family. 2 isoforms of the human protein are produced by alternative splicing.<br><br>Protein type: Secreted, signal peptide; Secreted<br><br>Chromosomal Location of Human Ortholog: 8q24<br><br>Cellular Component: extracellular space; extracellular region<br><br>Molecular Function: hormone activity<br><br>Biological Process: regulation of myelination; iodide transport; thyroid gland development; hormone biosynthetic process; signal transduction; thyroid hormone metabolic process<br><br>Disease: Thyroid Dyshormonogenesis 3; Autoimmune Thyroid Disease, Susceptibility To, 3 |
| **Research Articles on TG** | **1.** Postoperative-stimulated Tg at the time of (131)I remnant ablation is a useful biochemical marker for prediction of disease status in patients with differentiated thyroid carcinoma after total thyroidectomy. |
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| **Product Note** | Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details. |

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