Thyroglobulin (TG) Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	Thyroglobulin (TG), Polyclonal Antibody
Full Product Name	Biotin-Linked Polyclonal Antibody to Thyroglobulin (TG)
Product Gene Name	anti-TG antibody
Product Synonym Names	AITD3; TGN
Clonality	Polyclonal
Host	Rabbit
Species Reactivity	Mouse, Rat
Concentration	500ug/ml (lot specific)
Matching Pairs	Unconjugated Antibody: TG (MBS2016921) Biotin Conjugated Antibody: TG (MBS2091894)
Matching Pairs	Biotin Conjugated Antibody: TG (MBS2091894) Immunogen: TG (MBS2018366)
Molecular Weight	298,383 Da
OMIM	X05615 mRNA
3D Structure	ModBase 3D Structure for P01266
Supply Chain Verification	Manufactured in a lab with traceable raw materials. Bulk orders can typically be prepared to the customer's specifications, please inquire.
Conjugation	Biotin
Cross Reactivity	Mouse
Immunogen	Thyroglobulin (Ser2418~Asn2660)
ISO Certification	Manufactured in an ISO 9001:2015 and ISO 13485:2016 Certified Laboratory.
Applications Tested/Suitable for anti-TG antibody	Western Blot (WB)
Related Product Information for anti-TG antibody	MBS2091894 is an antibody targeting TG. Also known as Biotin-Linked Polyclonal Antibody to Thyroglobulin (TG). Reactive in Mouse, Rat. Host: Rabbit.
Other Notes	Small volumes of anti-TG antibody 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.

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
UniProt Gene Name	TG
UniProt Synonym Gene Names	Tg
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. Protein type: Secreted; Secreted, signal peptide Chromosomal Location of Human Ortholog: 8q24.22 Cellular Component: extracellular region; extracellular space Molecular Function: hormone activity Biological Process: hormone biosynthetic process; iodide transport; regulation of myelination; signal transduction; thyroid gland development; thyroid hormone metabolic process Disease: Autoimmune Thyroid Disease, Susceptibility To, 3; Thyroid Dyshormonogenesis 3
Research Articles on TG	**1.** findings proved that iodinated TG in thyroid follicular lumen regulated TTF-1 and PAX8 expression through thyroid stimulating hormone/thyroid stimulating hormone receptor (TSH/TSHR) mediated cAMP-PKA and PLC-PKC signaling pathways.
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