

Native Bovine TG

Cat. No. TG-121B **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Native Bovine TG was purified from bovine thyroid.
Species	Bovine
Source	Bovine Thyroid
Description	Bovine thyroglobulin is a large, tetrameric glycoprotein produced in the thyroid gland as a precursor to thyroid hormones. Its large size and absence from plasma under normal conditions makes it very immunogenic and reduces the chance that antibodies to this carrier protein will cross-react with plasma proteins in immunoassays. Haptens may be conjugated to thyroglobulin via accessible secondary amines. Iodine-containing protein that is stored in the thyroid gland. Converted into circulating thyroxines when the thyroid is stimulated by thyroid-stimulating hormone (TSH) from the pituitary. Because its expression is unique to the thyroid, it is a sensitive indicator of recurrence or metastasis of thyroid cancer that has been treated by thyroid ablation.
Molecular Mass	~670 kDa
Purity	≥90% (agarose gel electrophoresis)
Applications	Bovine thyroglobulin was shown to stimulate proliferation in rat thyroid follicular cells as well as in primary porcine thyroid epithelial cells. This effect was mediated through PI3K signaling. Often used as a carrier protein for the production of antibodies. Its advantage is the large number of tyrosine residues that can be used for conjugation

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using the diazo reaction.

Storage Store at -20°C.

Reconstitution H₂O: soluble 20 mg/mL

GENE INFORMATION

Gene Name TG thyroglobulin [*Bos taurus*]

Official Symbol TG

Synonyms thyroglobulin; hereditary goitre

Gene ID 280706

mRNA Refseq NM_173883

Protein Refseq NP_776308

UniProt ID P01267

Chromosome Location 14q12-q15

Pathway Autoimmune thyroid disease, organism-specific biosystem; Autoimmune thyroid disease, conserved biosystem; Thyroid hormone synthesis, organism-specific biosystem

Function hormone activity; NOT neurexin family protein binding; NOT receptor activity

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