



Mouse Thyroglobulin,TG ELISA Kit

Product Code	CSB-E08241m
Abbreviation	TG
Protein Biological Process 1	Biosynthesis/Metabolism
Target Name	thyroglobulin
Uniprot No.	O08710
Alias	AITD3, TGN
Product Type	ELISA Kit
Immunogen Species	Mus musculus (Mouse)
Protein Biological Process 3	Thyroid hormones biosynthesis
Sample Types	serum, plasma, tissue homogenates
Detection Range	10 ng/mL-160 ng/mL
Sensitivity	10 ng/mL
Assay Time	1-5h
Sample Volume	50-100ul
Detection Wavelength	450 nm
Lead Time	3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx.
Research Area	Metabolism
Gene Names	Tg
Tag Info	quantitative
Protein Description	Competitive

Description

This Mouse Thyroglobulin (TG) ELISA Kit was designed for the quantitative measurement of Mouse Thyroglobulin (TG) protein in serum, plasma, tissue homogenates. It is a Competitive ELISA kit, its detection range is 10 ng/mL-160 ng/mL and the sensitivity is 10 ng/mL.

Target Details

Thyroglobulin (Tg) is a glycoprotein homodimer produced predominantly by the thyroid 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 dysmorphogenesis, 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 thyroiditis.

Product Precision

Intra-assay Precision (Precision within an assay): CV%<8%

Three samples of known concentration were tested twenty times on one plate to assess.

Inter-assay Precision (Precision between assays): CV%<10%

Three samples of known concentration were tested in twenty assays to assess.

Linearity

To assess the linearity of the assay, samples were spiked with high concentrations of mouse TG in various matrices and diluted with the Sample Diluent to produce samples with values within the dynamic range of the assay.

?	Sample	Serum(n=4)
	Average %	90
1:1	Range %	85-100
	Average %	89
1:2	Range %	82-100
	Average %	93
1:4	Range %	88-100
	Average %	95
1:8	Range %	89-105

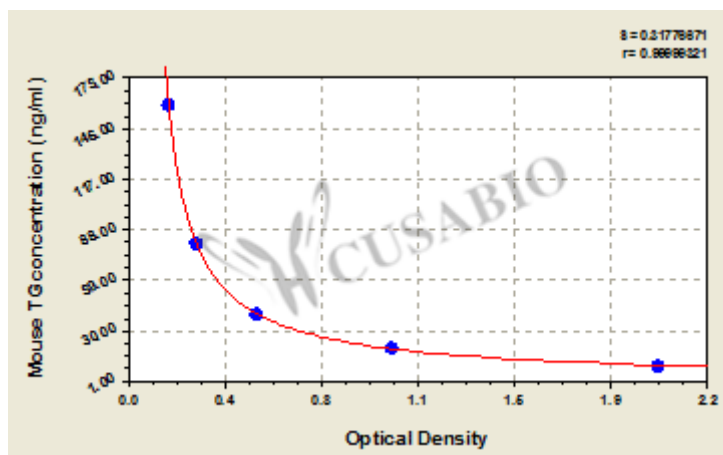
Recovery

The recovery of mouse TG spiked to levels throughout the range of the assay in various matrices was evaluated. Samples were diluted prior to assay as directed in the Sample Preparation section.

Sample Type	Average % Recovery	Range
Serum (n=5)	97	92-110
EDTA plasma (n=4)	95	89-100

Typical

These standard curves are provided for demonstration only. A standard curve should be generated for each set of samples assayed.



ng/ml OD1 OD2 Average ?

160 0.165 0.170 0.168 ?

80 0.276 0.271 0.274 ?

40 0.504 0.499 0.502 ?

20 1.008 1.034 1.021 ?

10 2.055 2.029 2.042 ?