Mouse Tri-iodothyronine,T3 ELISA Kit

Product Code	CSB-E05086m
Abbreviation	T3
Protein Biological Process 1	Thyroid function
Target Name	Tri-iodothyronine,T3
Product Type	ELISA Kit
Immunogen Species	Mus musculus (Mouse)
Sample Types	serum, plasma, tissue homogenates
Detection Range	0.5 ng/mL-8 ng/mL
Sensitivity	0.5 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	Signal Transduction
Quality Control	A microplate reader capable of measuring absorbance at 450 nm, with the correction wavelength set at 600 nm - 630 nm. An incubator that can provide stable incubation conditions up to 37°C±5°C. Centrifuge Vortex Squirt bottle, manifold dispenser, or automated microplate washer Absorbent paper for blotting the microtiter plate 50-300ul multi-channel micropipette Pipette tips Single-channel micropipette with different ranges 100ml and 500ml graduated cylinders Deionized or distilled water Timer Test tubes for dilution
Tag Info	quantitative
Protein Description	Competitive
Component	An assay plate --- The 96-well plate has been pre-coated with an anti-mouse T3 antibody. Standard (6 x 1 ml) --- Reconstitute one of the standards with sample diluent at dilution series and draw the standard curve. Biotin-conjugated T3 (1 x 6 ml) HRP-avidin (1 x 6 ml)--- HRP catalyzes the TMB substrate for color

development and needs to be diluted before use.
Wash Buffer (20 x concentrate) (1 x 15 ml) --- Wash away the unbound solution and non-specific substances.
Substrate A (1 x 7 ml) --- Mix with substrate B, and the TMB is catalyzed by HRP to elicit a chromogenic signal.
Substrate B (1 x 7 ml) --- Mix with substrate A, and the TMB is catalyzed by HRP to elicit a chromogenic signal.
Stop Solution (1 x 7 ml) --- Add stop solution and stop the color development. The solution color immediately turns from blue to yellow.
Four Adhesive Strip (For 96 wells) --- Cover the microtiter plate when incubation.
An instruction manual

Description

The mouse Tri-iodothyronine (T3) ELISA kit is used to detect and quantify the concentrations of T3 in serum, plasma, and tissue homogenates. This kit exclusively recognizes mouse T3. It adopts the competitive inhibition enzyme immunoassay technique in which Biotin-conjugated T3 and T3 in samples or standard compete for binding to the pre-coated T3 antibody. And HRP catalyzes TMB to elicit a chromogenic reaction. The intensity of the color is inversely proportional to the amount of T3 in the sample. This ELISA kit has been confirmed to have high sensitivity, strong specificity, premium precision, and lot-to-lot consistency. See the instructions for more details.

T3 is a hormone produced by the thyroid gland and plays an important role in the body's control of metabolism. Mariane de Oliveira etc. demonstrated that T3 induced a decrease in lipid accumulation through the oxidation of fatty acids in adipocytes and improved oxidative stress and DNA damage. T3 elevated the production of adipokines, adiponectin, and leptin with a concomitant deduction in PPARy and FNDC5 levels.

Product Precision

Intra-assay Precision (Precision within an assay): CV%<15%

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

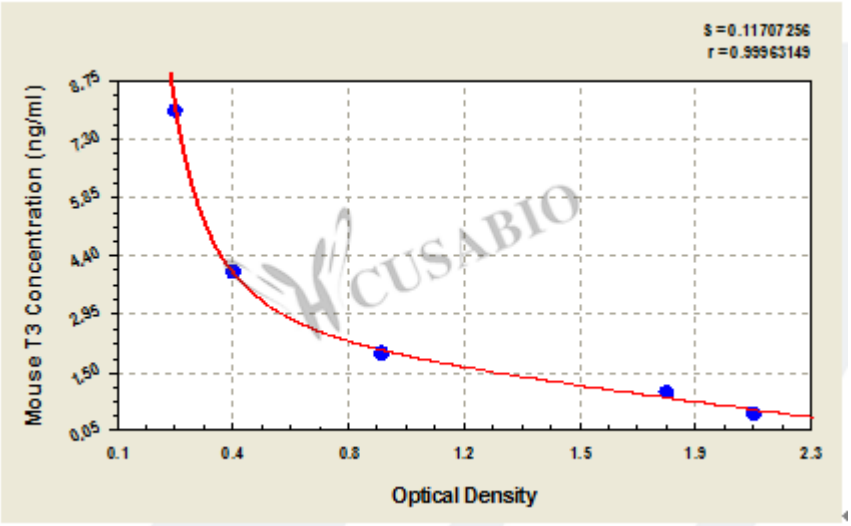
Inter-assay Precision (Precision between assays): CV%<15%

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

	Intra-Assay Precision			Inter-Assay Precision		
Sample	1	2	3	1	2	3
n	20	20	20	20	20	20
Mean(ng/ml)	1.959	2.008	1.976	1.948	2.017	1.966
SD	0.019	0.027	0.028	0.029	0.033	0.032
CV(%)	1.998	2.889	2.937	2.977	3.554	3.279

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
0.5	2.109	2.086	2.098
1.0	1.813	1.824	1.819
2.0	0.911	0.905	0.908
4.0	0.438	0.428	0.433
8.0	0.245	0.251	0.248