Mouse C-Peptide ELISA Kit

Product Code	CSB-E05068m
Abbreviation	C-Peptide
Target Name	C-Peptide
Product Type	ELISA Kit
Immunogen Species	Mus musculus (Mouse)
Sample Types	serum, plasma
Detection Range	2.86 ng/mL-50 ng/mL
Sensitivity	0.625 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
Quality Control	A microplate reader capable of measuring absorbance at 450 nm, with the correction wavelength set at 600 nm or 630 nm. An incubator 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	Sandwich
Component	A micro ELISA plate ---The 96-well plate has been pre-coated with an anti-mouse C-peptide antibody. Six vials lyophilized standard ---Dilute a bottle of the standard at dilution series, read the OD values, and then draw a standard curve. One vial HRP-conjugated C-peptide antibody(6 ml/bottle) ---Bind to the C-peptide in the samples or standards and react with the substrate to make the solution chromogenic. One vial Wash Buffer (20x concentrate) (15ml/bottle) ---Wash away unbound or free substances.

Substrate A (1 x 7 ml)
Substrate B (1 x 7 ml)
One vial Stop Solution (7ml/bottle) ---Stop the color reaction. The solution color immediately turns from blue to yellow.
Four Adhesive Strips (For 96 wells) ---Cover the microplate when incubation.
An instruction manual

Description

The Mouse C-Peptide ELISA kit is a valuable tool for researchers working with mouse samples in the field of diabetes and insulin-related studies. This kit is specifically designed for detecting C-peptide levels in mouse serum and plasma samples. With a detection range of 2.86 ng/mL to 50 ng/mL and a sensitivity of 0.625 ng/ml, it offers precise measurements within a relatively low concentration range. The assay principle is quantitative, utilizing a sandwich method for detection. The assay time is efficient, ranging from 1 to 5 hours, making it a convenient option for laboratories. The required sample volume is 50-100 µl and the detection wavelength is set at 450 nm, ensuring accurate and reliable results. This ELISA kit has been utilized in more than 8 research papers, indicating its widespread acceptance and reliability within the scientific community. Researchers have successfully employed this kit in various experimental settings to measure C-peptide levels in mouse serum, contributing to understanding diabetes, insulin, and related fields.

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.

Linearity

To assess the linearity of the assay, samples were spiked with high concentrations of mouse C-Peptide 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)
1:1	Average %	93
	Range %	85-99
1:2	Average %	90
	Range %	85-96
1:4	Average %	95
	Range %	87-106
1:8	Average %	95
	Range %	89-100

Recovery

The recovery of mouse C-Peptide 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)	96	89-100

	EDTA plasma (n=4)	95	91-103

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