

Datasheet for ABIN2851001 C-Peptide ELISA Kit



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Overview

Quantity: 96 tests

Target: C-Peptide

Reactivity: Human

Method Type: Competition ELISA

Detection Range: 0.312 ng/mL - 20 ng/mL

Minimum Detection Limit: 0.312 ng/mL

Application: ELISA

Product Details

Purpose: The kit is a competitive inhibition enzyme immunoassay technique for the in vitro quantitative measurement of C-Peptide in human serum, plasma, tissue homogenates, cell lysates, cell culture supernates and other biological fluids.

Sample Type: Cell Culture Supernatant, Cell Lysate, Plasma, Serum, Tissue Homogenate

Analytical Method: Quantitative

Detection Method: Colorimetric

Specificity: This assay has high sensitivity and excellent specificity for detection of this index.

Cross-Reactivity (Details): No significant cross-reactivity or interference between this index and analogues was observed.
Note: Limited by current skills and knowledge, it is impossible for us to complete the cross-reactivity detection between this index and all the analogues, therefore, cross reaction may still exist.

Sensitivity: 0.148 ng/mL

Product Details

Components:	<ul style="list-style-type: none">• Pre-coated, ready to use 96-well strip plate• Standard (freeze dried)• Standard Diluent• Detection Reagent A• Detection Reagent B• Assay Diluent A• Assay Diluent B• TMB• Stop Solution• Wash Buffer (30X)• Plate sealer for 96 wells• Instruction manual
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Material not included:	<ol style="list-style-type: none">1. Microplate reader with 450 ± 10nm filter.2. Precision single or multi-channel pipettes and disposable tips.3. Eppendorf Tubes for diluting samples.4. Deionized or distilled water.5. Absorbent paper for blotting the microtiter plate.6. Container for Wash Solution.
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Target Details

Target:	C-Peptide
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Abstract:	C-Peptide Products
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Application Details

Sample Volume:	50 µL
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Assay Time:	1 - 4.5 h
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Plate:	Pre-coated
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Protocol:	<ol style="list-style-type: none">1. Prepare all reagents, samples and standards2. Add 50µL standard or sample to each well. And then add 50µL prepared Detection Reagent A immediately. Shake and mix. Incubate 1 hour at 37°C3. Aspirate and wash 3 times4. Add 100µL prepared Detection Reagent B. Incubate 1 hour at 37°C5. Aspirate and wash 5 times6. Add 90µL Substrate Solution. Incubate 15-25 minutes at 37°C7. Add 50µL Stop Solution. Read at 450 nm immediately.
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Application Details

Assay Procedure: This assay employs the competitive inhibition enzyme immunoassay technique. A monoclonal antibody specific to the index has been pre-coated onto a microplate. A competitive inhibition reaction is launched between biotin labeled the index and unlabeled the index (Standards or samples) with the pre-coated antibody specific to the index. After incubation the unbound conjugate is washed off. Next, Avidin conjugated to Horseradish Peroxidase (HRP) is added to each microplate well and incubated. The amount of bound HRP conjugate is reverse proportional to the concentration of the index in the sample. After addition of the substrate solution, the intensity of color developed is reverse proportional to the concentration of the index in the sample.

Assay Precision:

- Intra-assay Precision (Precision within an assay): 3 samples with low, middle and high level the index were tested 20 times on one plate, respectively.
- Inter-assay Precision (Precision between assays): 3 samples with low, middle and high level the index were tested on 3 different plates, 8 replicates in each plate.
- $CV(\%) = SD/mean \times 100$
- Intra-assay: $CV < 10\%$
- Inter-assay: $CV < 12\%$

Restrictions: For Research Use only

Handling

Precaution of Use: The Stop Solution suggested for use with this kit is an acid solution. Wear eye, hand, face, and clothing protection when using this material.

Handling Advice: The stability of ELISA kit is determined by the loss rate of activity. The loss rate of this kit is less than 5 % within the expiration date under appropriate storage conditions. Note: To minimize unnecessary influences on the performance, operation procedures and lab conditions, especially room temperature, air humidity and incubator temperatures should be strictly regulated. It is also strongly suggested that the whole assay is performed by the same experimenter from the beginning to the end.

Storage: 4 °C, -20 °C

Storage Comment: The Assay Plate, Standard, Detection Reagent A and Detection Reagent B should be stored at -20°C upon being received. After receiving the kit, Substrate should be always stored at 4°C. Other reagents are kept according to the labels on vials. But for long term storage, please keep the whole kit at -20°C. The unused strips should be kept in a sealed bag with the desiccant provided to minimize exposure to damp air. The test kit may be used throughout the expiration date of the kit (six months from the date of manufacture). Opened test kits will remain stable

Handling

until the expiring date shown, provided it is stored as prescribed above.

Expiry Date: 12 months