

Datasheet for ABIN1572980

UCP1 ELISA Kit

Cross-Reactivity (Details):

Sensitivity:

exist.

0.119 ng/mL





Go to Product page

| Overview | |
|--------------------------|--|
| Quantity: | 96 tests |
| Target: | UCP1 |
| Reactivity: | Rat |
| Method Type: | Sandwich 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 sandwich enzyme immunoassay for the in vitro quantitative measurement of UCP1 in rat tissue homogenates, cell lysates, cell culture supernates and other biological fluids. |
| Sample Type: | Cell Culture Supernatant, Cell Lysate, Tissue Homogenate |
| Analytical Method: | Quantitative |
| Detection Method: | Colorimetric |
| Specificity: | This assay has high sensitivity and excellent specificity for detection of this index. |
| | |

No significant cross-reactivity or interference between this index and analogues was observed.

reactivity detection between this index and all the analogues, therefore, cross reaction may still

Note: Limited by current skills and knowledge, it is impossible for us to complete the cross-

Product Details

Components:

- · 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

Material not included:

- 1. Microplate reader with 450 \pm 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.

Target Details

| Target: | UCP1 |
|-------------------|--|
| Alternative Name: | UCP1 (UCP1 Products) |
| Background: | Alternative name: SLC25A7, UCP, Thermogenin, Solute carrier family 25 member 7 |
| Gene ID: | 24860 |
| UniProt: | P04633 |
| Pathways: | Proton Transport, Brown Fat Cell Differentiation |

Application Details

| Sample Volume: | 100 μL |
|----------------|---|
| Assay Time: | 1 - 4.5 h |
| Plate: | Pre-coated |
| Protocol: | 1. Prepare all reagents, samples and standards 2. Add 100µL standard or sample to each well. Incubate 2 hours at 37°C |
| | 3. Aspirate and add 100µL prepared Detection Reagent A. Incubate 1 hour at 37°C |

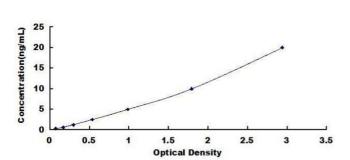
| | 4. Aspirate and wash 3 times |
|--------------------|---|
| | 5. Add 100µL prepared Detection Reagent B. Incubate 1 hour at 37°C |
| | 6. Aspirate and wash 5 times |
| | 7. Add 90µL Substrate Solution. Incubate 15-25 minutes at 37°C |
| | 8. Add 50µL Stop Solution. Read at 450nm immediately. |
| Assay Procedure: | The microtiter plate provided in this kit has been pre-coated with an antibody specific to the |
| | index. Standards or samples are then added to the appropriate microtiter plate wells with a |
| | biotin-conjugated antibody preparation specific to the index. Next, Avidin conjugated to |
| | Horseradish Peroxidase (HRP) is added to each microplate well and incubated. After TMB |
| | substrate solution is added, only those wells that contain the index, biotin-conjugated antibody |
| | and enzyme-conjugated Avidin will exhibit a change in color. The enzyme-substrate reaction is |
| | terminated by the addition of sulphuric acid solution and the color change is measured |
| | spectrophotometrically at a wavelength of 450nm ± 10nm. The concentration of the index in |
| | the samples is then determined by comparing the O.D. of the samples to the standard curve. |
| 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/meanX100Intra-assay: CV&lt10% |
| | • 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 until the expiring date shown, provided it is stored as prescribed above.

Expiry Date:

12 months

Images



ELISA

Image 1.