

## Mouse UCP-3 (Uncoupling Protein 3, Mitochondrial) ELISA Kit | UCP-3 elisa kit

Mouse UCP-3 (Uncoupling Protein 3, Mitochondrial)

CATALOG #  
**AAA102637**

REACTIVITY  
**Mouse**

### PRODUCT SYNONYMS

UCP-3 (Uncoupling Protein 3; Mitochondrial); Mouse UCP-3 (Uncoupling Protein 3; UCP-3 elisa kit

### PRODUCT SPECIFICATIONS

|                         |                                                                                                                                                                                                           |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reactivity              | Mouse                                                                                                                                                                                                     |
| Specificity             | This assay has high sensitivity and excellent specificity for detection ofUCP-3 . No significant cross-reactivity or interference betweenUCP-3 and analogues was observed.                                |
| Sequence Length         | 308                                                                                                                                                                                                       |
| Assay Type              | Sandwich ELISA, Double Antibody                                                                                                                                                                           |
| Samples                 | Serum, Plasma, Cell Culture Supernatant, cell or tissue lysate, Other liquid samples                                                                                                                      |
| Detection Range         | 0.156-10ng/ml                                                                                                                                                                                             |
| Sensitivity             | 0.094ng/ml                                                                                                                                                                                                |
| Intra-assay Precision   | Intra-assay Precision (Precision within an assay): 3 samples with low, middle and high levelUCP- 3 were tested 20 times on one plate, respectively. Intra-Assay: CV<8%                                    |
| Inter-assay Precision   | Inter-assay Precision (Precision between assays): 3 samples with low, middle and high levelUCP- 3 were tested on 3 different plates, 8 replicates in each plate. CV(%) = SD/meanX100. Inter-Assay: CV<10% |
| Preparation and Storage | Store entire kit at 2-8C for short-term. For longer-term, please store the microplate & standard at -20C, while the remaining reagents can be stored at 2-8C                                              |

### IMAGES

#### Typical Data & Standard Curve

Results of a typical standard run of a UCP-3 ELISA Kit are shown below. This standard curve was generated at our lab for demonstration purpose only. Each user should obtain their own standard curve as per experiment. (N/A-not applicable)

|   |       |       |       |       |       |       |       |       |       |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| X | ng/ml | 0     | 0.156 | 0.312 | 0.625 | 1.25  | 2.5   | 5     | 10    |
| Y | OD450 | 0.117 | 0.184 | 0.277 | 0.422 | 0.704 | 1.305 | 2.105 | 2.521 |

Standard Curve (Sample)

### ADDITIONAL INFORMATION

#### Related Product Information for UCP-3 elisa kit

**Principle of the Assay:** This kit was based on sandwich enzyme-linked immune-sorbent assay technology. Anti-UCP-3 antibody was pre-coated onto 96-well plates. And the biotin conjugated anti-UCP-3 antibody was used as detection antibodies. The standards, test samples and biotin conjugated detection antibody were added to the wells subsequently, and wash with wash buffer. HRP-Streptavidin was added and unbound conjugates were washed away with wash buffer. TMB substrates were used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the UCP-3 amount of sample captured in plate. Read the O.D. absorbance at 450nm in a microplate reader, and then the concentration ofUCP-3 can be calculated.

NCBI AND UNIPROT INFORMATION

|                                  |                                                      |
|----------------------------------|------------------------------------------------------|
| NCBI GI #                        | 223462768                                            |
| NCBI GeneID                      | 22229                                                |
| Molecular Weight                 | 33,911 Da                                            |
| NCBI Official Full Name          | Uncoupling protein 3 (mitochondrial, proton carrier) |
| NCBI Official Synonym Full Names | uncoupling protein 3 (mitochondrial, proton carrier) |
| NCBI Official Symbol             | Ucp3                                                 |
| NCBI Official Synonym Symbols    | UCP-3; Slc25a9; AI645527                             |
| NCBI Protein Information         | mitochondrial uncoupling protein 3                   |
| UniProt Protein Name             | Mitochondrial uncoupling protein 3                   |
| UniProt Gene Name                | <b>Ucp3</b>                                          |
| UniProt Synonym Gene Names       | Slc25a9; UCP 3                                       |
| UniProt Entry Name               | UCP3_MOUSE                                           |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/mouse-elisa-kits/ucp-3-uncoupling-protein-3-mitochondrial/102637>