

## Rat Carnitine Palmitoyltransferase 1A, Liver (CPT1A) ELISA Kit | CPT1A elisa kit

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CATALOG #  
**AAA186819**

REACTIVITY  
**Rat**

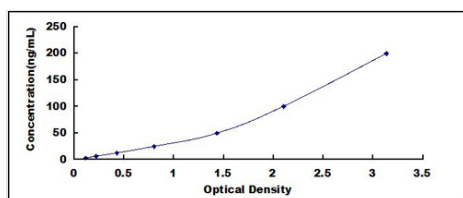
### PRODUCT SYNONYMS

Carnitine Palmitoyltransferase 1A; Liver (CPT1A); Rat Carnitine Palmitoyltransferase 1A; Liver (CPT1A) ELISA Kit; CPT1-L; Carnitine O-palmitoyltransferase I; liver isoform; CPT1A elisa kit

### PRODUCT SPECIFICATIONS

|                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|---------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reactivity                                        | Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Specificity                                       | This assay has high sensitivity and excellent specificity for detection of Carnitine Palmitoyltransferase 1A, Liver (CPT1A).<br>No significant cross-reactivity or interference between Carnitine Palmitoyltransferase 1A, Liver (CPT1A) and analogues was observed.                                                                                                                                                                                                                       |
| Sequence Length                                   | 756                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Assay Type                                        | Double-antibody Sandwich                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Samples                                           | Serum, Plasma, Tissue Homogenates and Other Biological Fluids                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Detection Range                                   | 3.12-200ng/mL                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Sensitivity                                       | < 1.18ng/mL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Application                                       | Enzyme-linked immunosorbent assay for Antigen Detection.                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Intra-assay Precision (Precision within an assay) | 3 samples with low, middle and high level Carnitine Palmitoyltransferase 1A, Liver (CPT1A) were tested 20 times on one plate, respectively.                                                                                                                                                                                                                                                                                                                                                |
| Inter-assay Precision (Precision between assays)  | 3 samples with low, middle and high level Carnitine Palmitoyltransferase 1A, Liver (CPT1A) were tested on 3 different plates, 8 replicates in each plate.                                                                                                                                                                                                                                                                                                                                  |
| CV(%) =                                           | SD/meanX100                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Intra-Assay                                       | CV<10%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Inter-Assay                                       | CV<12%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Preparation and Storage                           | The stability of 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 condition.<br>To minimize extra influence on the performance, operation procedures and lab conditions, especially room temperature, air humidity, incubator temperature should be strictly controlled. It is also strongly suggested that the whole assay is performed by the same operator from the beginning to the end. |

### IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

|                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for CPT1A elisa kit | The test principle applied in this kit is Sandwich enzyme immunoassay. The microtiter plate provided in this kit has been pre-coated with an antibody specific to Carnitine Palmitoyltransferase 1A, Liver (CPT1A). Standards or samples are then added to the appropriate microtiter plate wells with a biotin-conjugated antibody specific to Carnitine Palmitoyltransferase 1A, Liver (CPT1A). 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 Carnitine Palmitoyltransferase 1A, Liver (CPT1A), 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 Carnitine Palmitoyltransferase 1A, Liver (CPT1A) in the samples is then determined by comparing the O.D. of the samples to the standard curve. |
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NCBI AND UNIPROT INFORMATION

|                                  |                                                          |
|----------------------------------|----------------------------------------------------------|
| NCBI GI #                        | 119595128                                                |
| NCBI GeneID                      | 1374                                                     |
| UniProt Accession #              | P50416; Q8TCU0; Q9BWK0                                   |
| Molecular Weight                 | 86,239 Da                                                |
| NCBI Official Full Name          | carnitine palmitoyltransferase 1A (liver), isoform CRA_a |
| NCBI Official Synonym Full Names | carnitine palmitoyltransferase 1A                        |
| NCBI Official Symbol             | CPT1A                                                    |
| NCBI Official Synonym Symbols    | CPT1; CPT1-L; L-CPT1                                     |
| NCBI Protein Information         | carnitine O-palmitoyltransferase 1, liver isoform        |
| UniProt Protein Name             | Carnitine O-palmitoyltransferase 1, liver isoform        |
| UniProt Gene Name                | CPT1A                                                    |
| UniProt Synonym Gene Names       | CPT1; CPT1-L; CPT I; CPTI-L                              |

**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/rat-elisa-kits/carnitine-palmitoyltransferase-1a-liver-cpt1a/186819>