Version: 2.0.0 Revision date: 09 Apr 2025



Human Acyl-CoA Thioesterase 12 (ACOT12) ELISA Kit

Catalogue No.:abx385581

Human Acyl-CoA Thioesterase 12 (ACOT12) ELISA Kit is an ELISA Kit for the in vitro quantitative measurement of Human Acyl-CoA Thioesterase 12 (ACOT12) concentrations in tissue homogenates, cell lysates and other biological fluids.

Target: Acyl-CoA Thioesterase 12 (ACOT12)

Reactivity: Human

Tested Applications: ELISA

Recommended dilutions: Optimal dilutions/concentrations should be determined by the end user.

Storage: Shipped at 4 °C. Upon receipt, store the kit according to the storage instruction in the

kit's manual.

Validity: The validity for this kit is 6 months.

Stability: The stability of the kit is determined by the rate of activity loss. The loss rate is less than

5% within the expiration date under appropriate storage conditions. To minimize performance fluctuations, operation procedures and lab conditions should be strictly controlled. It is also strongly suggested that the whole assay is performed by the same

user throughout.

UniProt Primary AC: Q8WYK0 (UniProt, ExPASy)

Gene Symbol: ACOT12

GenelD: <u>134526</u>

OMIM: <u>614315</u>

HGNC: 24436

KEGG: hsa:134526

Ensembl: ENSG00000172497

String: <u>9606.ENSP00000303246</u>

Test Range: 0.313 ng/ml - 20 ng/ml

Sensitivity: < 0.188 ng/ml

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Standard Form: Lyophilized

Detection Method: Colorimetric

Assay Type: Sandwich

Assay Data: Quantitative

Sample Type: Tissue homogenates, cell lysates and other biological fluids.

Kit Components: The kit components listed are for reference only. The product manual may differ slightly.

The product should be used as stated on the product manual included and delivered

together with the product.

• Pre-coated 96-Well Microplate

Standard

· Standard Diluent Buffer

Wash Buffer

Detection Reagent A

• Detection Reagent B

• Diluent A

• Diluent B

• TMB Substrate

Stop Solution

• Plate Sealer

Material Required But Not

Provided:

• 37°C incubator

• Multi and single channel pipettes and sterile pipette tips

Squirt bottle or automated microplate washer

• 1.5 ml tubes

Distilled water

Absorbent filter papers

• 100 ml and 1 liter graduated cylinders

• Microplate reader (wavelength: 450 nm)

• ELISA Shaker

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Sample Collection/Preparation:

- Serum: Samples should be collected into a serum separator tube. Coagulate the serum by leaving the tube undisturbed in a vertical position overnight at 4°C or at room temperature for up to 60 minutes. Centrifuge at approximately 1000 × g for 20 min. Analyze the serum immediately or aliquot and store at -20°C or -80°C.
- Plasma: Collect plasma using heparin or EDTA as an anticoagulant. Centrifuge for 15 minutes at 1000 × g within 30 minutes of collection. Assay immediately or aliquot and store at -20°C or -80°C. Avoid hemolysis and high cholesterol samples.
- Tissue homogenates: The preparation of tissue homogenates will vary depending upon tissue type this is just an example. Rinse tissues with ice-cold PBS to remove the excess of blood. Weigh before homogenization. Finely mince tissues and homogenize with a tissue homogenizer on ice in PBS and sonicate the cell suspension. Centrifuge the homogenates at 5000 × g for 5 min and collect the supernatant. Assay immediately or aliquot and store at -20°C.

Reagent Preparation:

This procedure is provided for reference only. The product manual may differ slightly. The product should be used as stated on the product manual included and delivered together with the product.

- 1) Standard: Prepare the standard with the recommended volume of Standard Diluent Buffer, to make the standard solution. Then use the Standard Diluent buffer to carry out serial dilutions of the standard solution, as instructed in the Protocol.
- 2) Wash Buffer: Dilute the concentrated Wash Buffer with distilled water, as instructed in the Protocol.
- 3) Detection Reagent Preparation: Calculate the total volume of working solution required. Dilute Detection Reagent A and Detection Reagent B with Diluent A and Diluent B, respectively, at 1:100.

Assay Procedure:

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- 1) Set standard, test samples and control wells.
- 2) Aliquot 100 µl of diluted standard into the standard wells.
- 3) Aliquot 100 µl of Standard Diluent buffer into control (zero) well.
- 4) Aliquot 100 µl of diluted samples into the sample wells. Incubate for 1 hr at 37 °C.
- 5) Aliquot 100 µl of Detection Reagent A to each well. Incubate for 1 hr at 37 °C.
- 6) Wash 3 times.
- 7) Aliquot 100 µl of Detection Reagent B to each well. Incubate for 90 mins at 37 °C.
- 8) Wash 5 times.
- 9) Aliquot 90 µl of TMB Substrate to each well. Incubate for 10-20 mins at 37 °C.
- 10) Aliquot 50 ul of Stop Solution.
- 11) Measure the OD at 450 nm.



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Note:

THIS PRODUCT IS FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES.

The range and sensitivity is subject to change. Please contact us for the latest product information. For accurate results, sample concentrations must be diluted to mid-range of the kit. If you require a specific range, please contact us in advance or write your request in your order comments.

Please note that our kits are optimised for detection of native samples, rather than recombinant proteins. We are unable to guarantee detection of recombinant proteins, as they may have different sequences or tertiary structures to the native protein.

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