

# Acetyl-CoA Assay Kit

**Cat. No.** Kit-0036    **Lot. No.** (See product label)

## SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
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| <b>Product Overview</b> | Acetyl-CoA Assay Kit is used for determining acetyl CoA level in a variety of samples.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Description</b>      | <p>Acetyl CoA is a central molecule of metabolism. It carries acetate, used in the build-up and breakdown of larger molecules. Acetyl CoA is key in synthetic pathways leading to sesquiterpenes, precursors to cholesterol and other sterols, flavenoids and other polyketides, polyenes and long-chain fatty acids. It is the source of the acetyl group used in histone acetylation. The acetyl group is also incorporated into a variety of other molecules such as acetylcholine, melatonin, heme and TCA cycle intermediates. We has developed a highly sensitive assay for determining Acetyl CoA level in a variety of biological samples. In the assay, free CoA is quenched then Acetyl CoA is converted to CoA. The CoA is reacted to form NADH which interacts with PicoProbe to generate fluorescence (Ex=535/Em=587 nm). The assay can detect 10 to 1000 pmol of Acetyl CoA (with detection limit ~ 0.4 <math>\mu</math>M) in a variety of samples.</p> |
| <b>Target Species</b>   | Mammals                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Usage</b>            | For research use only (RUO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Storage</b>          | Store kit at -20°C, protect from light. Warm Acetyl CoA Assay Buffer to room temperature prior to using it. Briefly centrifuge all small vials prior to opening.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Kit Components</b>   | <p>Acetyl CoA Assay Buffer 25 mlPicoProbe 0.2 mlConversion Enzyme 0.1 mlAcetyl CoA Enzyme Mix 0.5 mlAcetyl CoA Substrate Mix lyophilizedCoA Quencher 1.0</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

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mlQuench Remover lyophilized Acetyl CoA Standard (1  $\mu$ mol) lyophilized**Detection method** Fluorometric**Compatible Sample Types** Biological Fluid, Cell Lysate, Culture Medium, Plasma, Serum, Tissue Lysate, Urine Tel: 1-631-559-9269 1-516-512-3133 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127 45-1 Ramsey Road, Shirley, NY 11967, USA