



Product Information

Roar CETP Activity Assay Kit

Catalog No. RB-CETP

U.S. Pat. Nos. 5,585,235; 5,618,683; 5,770,355

Assay Method:	Fluorometric
Number of Assays:	250 assays in 200 µl total assay volume
Kit Contents:	Donor particle: 1 ml Acceptor particle: 1 ml Assay buffer: 5 ml 10X
Storage and Handling:	Store kit components at 4°C. If stored properly, components are stable for up to 1 year. DO NOT FREEZE.
Instrumentation:	Fluorescence spectrophotometer: cuvette or microplate reading formats Excitation: 465 nm / Emission: 535 nm

Introduction

Cholesteryl ester transfer protein (CETP) is present in normal human plasma and transfers neutral lipids from high density lipoproteins (HDL) to very low density lipoprotein (VLDL) and low density lipoprotein (LDL). CETP plays an important role in lipoprotein metabolism and influences the reverse cholesterol transport pathway. The **Roar CETP Activity Assay** is useful for measuring the CETP activity in human plasma and serum and in other species that express CETP.

The **Roar CETP Activity Assay Kit** uses a proprietary substrate that enables the detection of CETP-mediated transfer of neutral lipid from the substrate to a physiological acceptor. The transfer activity results in an increase in fluorescence intensity. In a total volume of 200 µl, the assay is linear from 0.2 to 0.8 µl of normal human plasma with a 3-hour incubation at 37°C.

Advantages

- Assay results not affected by endogenous plasma HDL, LDL or VLDL concentrations:
 - The Roar donor particle is the preferred substrate by CETP over HDL, thus eliminating competition from endogenous HDL present in the plasma sample.
 - The addition of excess exogenous acceptor normalizes endogenous acceptor lipoprotein concentration present in the sample.
 - Other methods, including radioisotopic methods, are affected by endogenous HDL concentration. An increasing plasma HDL concentration in the sample decreases the specific activity of the labeled HDL substrate due to the equal preference by CETP for either labeled or unlabeled HDL.
- Intra- and interassay coefficients of variation: $\leq 3\%$ ^{4,20,31,54}
- Assay components stable for up to 1 year.
- Assay substrates stable at high DMSO concentration (>10% v/v).

Materials Required, But Not Supplied

- Fluorimeter with appropriate wavelength capabilities (Ex: 465 nm; Em: 535 nm)
- 37°C water bath / incubator
- CETP source: plasma / serum (fresh or frozen), recombinant or purified CETP

Performance Characteristics of the Roar CETP Activity Kit

A. Plasma CETP activity titration and antibody inhibition

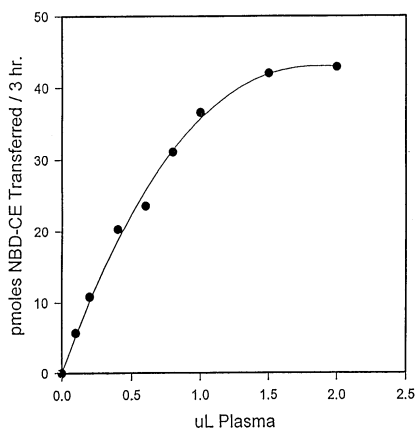


Figure 1. CETP activity in human plasma

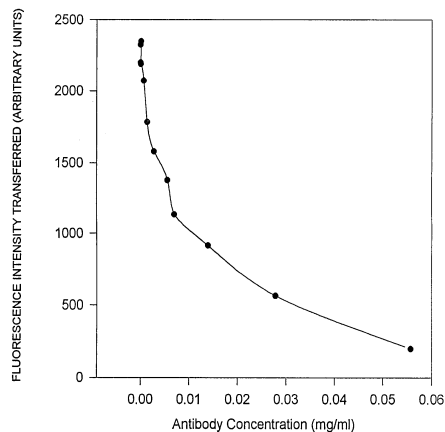


Figure 2. Inhibition of transfer by CETP neutralizing antibody

Related Products

R8899	CETP, partially purified, active human recombinant
RB-RPAK	Roar CETP/RP Activity
RB-EVAK	Roar Ex Vivo CETP Activity Assay Kit

Additional Information

For more information or to request a complete protocol, contact us at:

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For Research Use Only. Not for Diagnostic or Therapeutic Purposes.

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