コスモ・バイオ株式会社

Roar

Product Information

Roar LPL Activity Assay Kit, 200 assays

Catalog no. RB-LPL2

Introduction

Lipoprotein lipase (LPL) hydrolyzes triglycerides associated with VLDL. The **Roar LPL Activity Assay Kit** includes a non-fluorescent substrate emulsion that becomes intensely fluorescent upon interaction with LPL, and a pre-hydrolyzed standard for converting the fluorescence intensity reading to moles of reactant formed. The assay is not specific for LPL and will also detect hepatic lipase activity.

Kit Components

LPL Substrate Emulsion: 400 µl

LPL Standard Pre-hydrolyzed Substrate: 100 µl

Storage and Handling

Store kit components at 4°C.

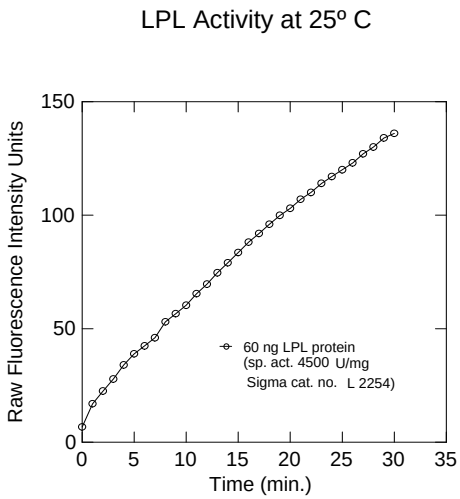
If stored properly, components are stable for up to 1 year. DO NOT FREEZE.

Materials Required, But Not Supplied

- Lipoprotein lipase source
- Assay buffer: 150 mM NaCl, 10 mM Tris, 2 mM EDTA, pH 7.4
- Fluorimeter with 370 nm excitation / 450 nm emission capability
- Black microplates (top-reading plate readers only) – one example is the U-bottom, black microplate from Thermo Electron cat. #7205 (also available from VWR cat. #25227-304)

Assay Method

1. Vortex substrate emulsion before use
2. Pre-mix substrate emulsion and assay buffer (150 mM NaCl, 10 mM Tris, 2 mM EDTA, pH 7.4) for all assays - use 1µl substrate with 200µl buffer
3. Distribute the mix among the wells or tubes
4. Add lipoprotein lipase source, incubate at 25°C - 37°C for 60 minutes
5. Read assay at 370 nm excitation / 450 nm emission



Standardization

Use the Standard Pre-hydrolyzed Substrate included with the kit to calculate pmoles of hydrolyzed substrate in the assay. The concentration of the standard is 75.7 µmoles/ml of pre-hydrolyzed substrate.

Make a 1:2500 dilution of the standard in assay buffer and serially dilute to generate a standard curve. For some very sensitive instruments, a further dilution of the standard (1:250000) may be necessary. Compare the fluorescence intensity values from the LPL samples assayed with the fluorescence intensity values of the standard curve.

RB-LPL Cited References

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