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For Research Use Only

Not For Diagnostic Or Therapeutic Use

KeyTec® TR-FLISA®
Enhancement Solution
Instruction Manual

1. Introduction

KeyTec® TR-FLISA® Enhancement Solution is an acid solution containing chelating and detergent for quantitative determination of Eu^{3+}/Sm^{3+} in a Time-Resolved Fluorescence Linked Immunosorbent Assay (TR-FLISA). Eu^{3+}/Sm^{3+} labeling reagents are used to label macromolecules like proteins, peptides, and oligonucleotides, and the resulting markers are suitable for various types of analysis based on solid phase separations. After a series of manipulation steps, the remaining Eu^{3+}/Sm^{3+}-containing marker is immobilized onto a microtiter plate after the unbound portion is washed away. This solution is then added and can dissociate Eu^{3+}/Sm^{3+} from the immobilized labeled antibody or protein within a few minutes, forming a homogeneous time-resolved fluorescent micellar chelate solution with extremely high brightness. Highly sensitive Eu^{3+}/Sm^{3+} measurements can be performed using an instrument containing a time-resolved fluorescence module. Due to this solution dissociates Eu^{3+}/Sm^{3+} into solution and produces an enhanced time-resolved fluorescence signal results in a low experimental background signal and a high upper measurement limit, thereby achieving a high signal-to-noise ratio and sensitivity.

2. Components

Components	A3010002S (50 mL)	A3010002L (250 mL)	A3010002B (4*250 mL)
KeyTec® TR-FLISA® Enhancement Solution	1 bottle 50 mL/bottle	1 bottle 250 mL/bottle	4 bottles 250 mL/bottle

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3. Storage Conditions

- Upon receipt, store the kit below 4 °C. It is recommended that this reagent be used within the validity period indicated on the Certificate of Analysis.

4. Use and precautions

- Allow reagents to reach room temperature before performing an assay.
- It is recommend using DELFIA-branded plates for DELFIA assays, also available in clear enzyme labeling plate. **NOTE:** Actual results may vary depended on the performance of the microplate used.
- Pour the required amount of Enhancement Solution into a 15-mLor 50-mL disposable plastic conical tube. Do not store Enhancement Solution in glassware.
- Due to the high sensitivity of this assay, it is essential to exercise caution to prevent Eu^{3+}/Sm^{3+} accumulation and contamination, which could result in elevated background levels or cross-contamination.
- Use 200 µL of Enhancement Solution for 96-well and 50 µL for 384-well plates.
- Dispense the Enhancement Solution slowly and shake gently for 5 min to avoid air bubbles.
- The incubation time for the assay varies depending on the Eu^{3+}/Sm^{3+} chelate, typically ranging from 5 to 30 minutes. This should be determined in the initial experiment.

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