KeyTec® TR-FRET mAb anti-FLAG-Solar Tb

CAT. & Size	A1020010S (1,000 tests)	**VKEYBIO-02-2025**
	A1020010L (10,000 tests)	**For Research Use Only**
Storage at	-60 °C or below	**Not For Diagnostic Or Therapeutic Use**

KeyTec® TR-FRET

mAb anti-FLAG-Solar Tb

Instruction Manual

1. Introduction

KeyTec® TR-FRET mAb anti-FLAG-Solar Tb is designed for developing the TR-FRET Assay. The anti-FLAG antibody is a rabbit monoclonal antibody. In the Protein-Protein Interaction assay, one FLAG-tagged protein binds to the donor (KeyTec® TR-FRET mAb anti-FLAG-Solar Tb[*1]), and the other protein is labeled (directly or indirectly) with the acceptor (KeyTec® TR-FRET LA/HX/Green[*2]). When the two proteins interact, the donor molecule is brought into proximity with the acceptor molecule. Excitation of the donor will result in the generation of the TR-FRET signal at 665 nm or 520nm, proportional to the extent of protein interaction.

[*1] KeyTec® TR-FRET Solar Eu: TR-FRET Donor Molecule

[*2] KeyTec® TR-FRET LA/HX/Green: TR-FRET Acceptor Molecule

2. Components

Components	A1020010S (1,000 tests[*3])	A1020010L (10,000 tests[*3])
KeyTec® TR-FRET **mAb anti-FLAG-Solar Tb (100X)**	1 vial 50 µL/vial	1 vial 500 µL/vial

[*3] Tests refers to the number of experimental wells that can be performed when the total reaction volume is 20 µL and reagents are used at the concentrations recommended in the instruction manual. For more details, please refer to the 《Guidelines Manual - KeyTec® TR-FRET Protein Interaction Analysis》.

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KeyTec® Materials Required But Not Supplied	CAT. & Size
KeyTec® TR-FRET Binding Assay Diluent Buffer	A1010001L (200 mL)
KeyTec® TR-FRET Solar Tb Detection Buffer	A1010002L (120 mL)
KeyTec® 384-Well White Flat Low-Volume Microplates, PS, Solid, Non-treated, No lid	M2000102N (40 Pcs/Box)
KeyTec® Fluorescent High-Transparency Microplate Top Seals	M1000102N (100 Pcs/Box)

3.   Storage Conditions

- Upon receipt, store the reagent -60 ℃.
- Up to 1 years from date of receipt, when stored and handled as recommended.
- When first thaw, aliquot the reagents as needed to avoid multiple freeze-thaw cycles.

4. Assay Procedure

4.1 Assay Format

Assay Format	Total Volume (20 μL[*4])
Other assay components	10 μL
KeyTec® TR-FRET Donor (Solar Eu/Tb) working solution (1X)	5 μL
KeyTec® TR-FRET Acceptor (LA/HX/Green) working solution (1X)	5 μL

[*5] The assay volume is optimized for 384-well microplates, and can be adjusted proportionally to perform in 96- or 1536-well microplates.

4.2 Reagents Handling

1)   Buffers

- KeyTec® TR-FRET Solar Tb Detection Buffer (A1010002L) has been optimized for maximum performance.

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- Use the same buffer to prepare both the donor and the acceptor (LA/HX/Green) conjugates.
- KeyTec® TR-FRET Binding Assay Diluent Buffer (A1010001L) is recommended for dilution and preparation of other components or samples.
- If using a homemade buffer solution, avoid SDS addition.

2) Conjugates

- Thaw reagents on ice and equilibrate to room temperature before use.
- Prepare working solutions as per the purchased product instructions. The storage solution for KeyTec® TR-FRET mAb anti-FLAG-Solar Tb is 100X; dilute 100 times for a 1X working solution. Add 5 μL of working solution per well (20 μL of total reaction). For example, mix 50 μL of the storage solution with 4950 μL of KeyTec® TR-FRET Solar Tb Detection Buffer for a 1X working solution.
- Optimal amounts per well can be further optimized based on different assay format and conditions.

4.3 Data Calculating

- When used with KeyTec® TR-FRET LA or KeyTec® TR-FRET HX, calculate the ratio of 665 nm/620 nm (TR-FRET Ratio) and the CV for each individual well.

$$\text{TR-FRET Ratio} = \frac{\text{Signal 665 nm}}{\text{Signal 620 nm}} \times 10{,}000$$

- When used with KeyTec® TR-FRET Green, calculate the ratio of 520 nm/490 nm (TR-FRET Ratio) and the CV for each individual well.

$$\text{TR-FRET Ratio} = \frac{\text{Signal 520 nm}}{\text{Signal 490 nm}} \times 10{,}000$$

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