

# TR-FRET PPAR alpha Coactivator Assay Kit, goat

## Product Information

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**Cat**

Kit-0974

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**Common Name**

TR-FRET

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**Cat.No.**

Kit-0974

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**Description**

The TR-FRET PPAR (peroxisome proliferator activated receptor) alpha Coactivator Assay provides a sensitive and robust method for high-throughput screening of potential PPAR alpha ligands as agonists or antagonists of ligand-dependent coactivator recruitment. The kit uses a terbium (Tb)-labeled anti-GST antibody, a fluorescein-labeled coactivator peptide, and a human recombinant PPAR alpha ligand-binding domain (PPAR alpha-LBD) that is tagged with glutathione-S-transferase (GST) in a homogeneous mix-and-read assay format.

### Agonist mode:

When running the TR-FRET PPAR alpha Coactivator Assay in agonist mode (to identify agonist compounds), PPAR alpha-LBD is added to ligand test compounds followed by addition of a mixture of the fluorescein-coactivator peptide and Tb-labeled anti-GST antibody. After an incubation period at room temperature, the 520 nm/495 nm TR-FRET ratio is calculated and can be used to determine the EC<sub>50</sub> from a dose response curve of the compound. Based on the biology of the PPAR alpha-coactivator peptide interaction, this ligand EC<sub>50</sub> is a composite value representing the amount of ligand required to bind to receptor, effect a conformational change, and recruit coactivator peptide.

### Antagonist mode:

When the TR-FRET PPAR alpha Coactivator Assay is run in antagonist mode (to identify antagonist compounds), PPAR alpha-LBD is added to ligand test compounds followed by addition of a mixture of agonist, fluorescein-coactivator peptide, and Tb-labeled anti-GST antibody. The concentration of agonist used in this mode is the EC<sub>80</sub> concentration as determined by first running the assay in



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agonist mode.

### Applications

Co-Factor Interaction Assay

### Storage

Store in ultra-cold freezer (-68 to -85°C).

### Shipping

Dry Ice

### Size

800 x 20 µL assays

### Kit Components

The TR-FRET PPAR alpha Coactivator Assay Kit contains PPAR alpha-LBD (GST) protein, fluorescently labeled PGC1α coactivator peptide, Tb-labeled anti-GST antibody, and buffers. Store components as indicated in the assay protocol (-80°C, -20°C, or 4°C).

### Materials Required but Not Supplied

Microplate Reader

**Detection method** Fluorescent