

## TR-FRET PPAR alpha Coactivator Assay Kit, rabbit

### Product Information

---

**Cat**

Kit-0930

---

**Common Name**

TR-FRET

---

**Cat.No.**

Kit-0930

---

**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



## TR-FRET PPAR alpha Coactivator Assay Kit, rabbit

agonist mode.

### Applications

Nuclear Receptor Assay

### Storage

Tb-anti-GST Antibody (Rabbit): Store at -20 °C

PPAR alpha-LBD, GST: Store at -80 °C

Fluorescein Coactivator Peptide: Store at -20 °C

TR-FRET Coregulator Buffer J: Store at 4 °C

1M DTT: Store at -20 °C or -80 °C

### Size

800 x 20 µL assays

### Kit Components

The TR-FRET PPAR alpha Coactivator Assay Kit contains PPAR alpha-LBD (GST) protein, fluorescently labeled PGC1a 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