

TR-FRET PPAR alpha Competitive Binding Assay Kit, goat

Product Information

Cat

Kit-0947

Common Name

TR-FRET

Cat.No.

Kit-0947

Description

The TR-FRET PPAR alpha Competitive Binding Assay provides a sensitive and robust method for high-throughput screening (HTS) of ligands for peroxisome proliferator-activated receptor alpha (PPAR alpha). The kit uses a terbium-labeled anti-GST antibody, a fluorescent small-molecule pan-PPAR ligand (Pan-PPAR Green), and a human PPAR alpha ligand-binding domain (LBD) that is tagged with glutathione S-transferase (GST), in a homogeneous mix-and-read assay format.

To assay:

When running the TR-FRET PPAR alpha Competitive Binding Assay, Pan-PPAR Green is added to ligand test compounds followed by addition of a mixture of the PPAR alpha-LBD and terbium anti-GST antibody. When the Pan-PPAR Green is bound to PPAR alpha, energy transfer from the terbium-labeled antibody to the tracer occurs, and a high TR-FRET ratio is observed. Competitive ligand binding to PPAR alpha is detected by a test compound's ability to displace the tracer, which results in a loss of FRET between the antibody and the tracer. After an incubation period at room temperature, the 520 nm/495 nm TR-FRET ratio is calculated and can be used to determine the IC₅₀ from a dose response curve of the compound. This type of binding assay is analogous to radioligandbased assays, except that it eliminates handling of radioactivity and enables a homogeneous "addition-only" format.

Applications

Competitive Binding Assay

Storage



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The TR-FRET PPAR alpha Competitive Binding Assay Kit contains PPAR alpha-LBD (GST) protein, Pan-PPAR Green, terbium-labeled anti-GST antibody, and buffers. Store components as indicated in the assay protocol (-80°C, -20°C, or +4°C).

Shipping

Dry Ice

Size

400 x 40 µL

Materials Required but Not Supplied

Microplate Reader

Detection method Fluorescent
