

TR-FRET Progesterone Receptor Coactivator Assay Kit

Product Information

Cat

Kit-0957

Common Name

TR-FRET

Cat.No.

Kit-0957

Description

The TR-FRET Progesterone Receptor Coactivator Assay Kit provides a sensitive and robust method for high-throughput screening of potential progesterone receptor (PR) ligands as agonists or antagonists of ligand-dependent coactivator recruitment. The kit uses a PR ligand-binding domain (PR-LBD) tagged with glutathione-S-transferase (GST) (also available separately), a terbium (Tb)-labeled anti-GST antibody, and a fluorescein-labeled coactivator peptide in a homogenous mix-and-read assay format.

Agonist Mode

When using the Lanthascreen TR-FRET Progesterone Receptor Coactivator Assay in agonist mode (to identify agonist compounds), PR-LBD is added to ligand test compounds, followed by the addition of a mixture of fluorescein-labeled coactivator peptide and Tb-labeled anti-GST antibody. After an incubation period at room temperature, the TR-FRET ratio of 520/495 nm is calculated and can be used to determine the EC₅₀ from a dose response curve of the compound. Based on the biology of the PR-coactivator peptide interaction, this ligand EC₅₀ 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 using the TR-FRET Progesterone Receptor Coactivator Assay in antagonist mode (to identify antagonist compounds), PR-LBD is added to ligand test compounds followed by addition of a mixture of agonist, fluorescein-labeled coactivator peptide, and terbium-labeled anti-GST antibody. The concentration of agonist used in this mode is the EC₈₀ concentration as determined by first



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running the assay in agonist mode.

Applications

Co-Factor Interaction Assay, Nuclear Receptor Assay

Storage

- 1 tube PR Ligand Binding Domain Recombinant Protein (store at -68 to -85°C)
- 1 tube of Peptide (store at -5 to -30°C)
- 2 bottles TR-FRET Buffer (store at -5 to -30°C)
- 1 tube Tb-Anti-GST Ab (store at -5 to -30°C)
- 1 tube of DTT (store at -5 to -30°C)

Size

800 x 20 µL assays
