



TR-FRET ER beta Coactivator Assay Kit

Product Information

Cat

Kit-0925

Common Name

TR-FRET

Cat.No.

Kit-0925

Description

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

Agonist Mode

To run the LanthaScreen TR-FRET ER beta Coactivator Assay in agonist mode (to identify agonist compounds), ER beta-LBD is added to ligand test compounds followed by the addition of a mixture of fluorescein-coactivator peptide and Tb-anti-GST antibody. After room temperature incubation, the TR-FRET 520: 495 emission ratio is calculated and used to determine the EC₅₀ from a dose response curve of the compound. Based upon the biology of the ER beta-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 the LanthaScreen TR-FRET ER beta Coactivator Assay Kit is run in antagonist mode (to identify antagonist compounds), ER beta-LBD is added to ligand test compounds followed by the addition of a mixture of agonist, fluorescein-coactivator peptide, and Tb-anti-GST antibody. The concentration of agonist used in this mode is the EC₈₀ concentration as determined by first running the assay in agonist mode.



TR-FRET ER beta Coactivator Assay Kit

Applications

Co-Factor Interaction Assay, Nuclear Receptor Assay

Storage

1 tube ER beta 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 vial 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
