

EphA2 Kinase (Human) Assay/Inhibitor Screening Assay Kit

Product Information

Cat.No.

Kit-0326

Product Overview

EphA2 Kinase (Human) Assay/Inhibitor Screening Assay Kit is a single-site, non-quantitative immunoassay for kinase activity of recombinant catalytic domain of EphA2 kinase. Plates are pre-coated with a newly designed "Tyrosine kinase-substrate-1", which can be easily phosphorylated by recombinant catalytic domain of EphA2 kinase. The detector antibody is PY-39, an antibody that specifically detects the phosphotyrosine residue on "Tyrosine kinase-substrate-1".

Description

The EphA2 receptor tyrosine kinase belongs to the Eph receptor family. The Eph family contains at least 14 members that are type I transmembrane glycoproteins. Upon cell-cell contact, Eph receptors interact with their ligands called ephrins. Glycosylphosphatidyl inositol-linked ephrin-A ligands bind to EphA receptors and transmembrane ephrin-B ligands bind to EphB receptors. Eph-ephrin signaling mediates contact-dependent cell interactions involved in the spatial organization of neurons and neural crest cells, embryogenesis, tissue patterning, and blood vessels formation.

Applications

1) Screening inhibitors or activators of recombinant catalytic domain of EphA2 Kinase. 2) Detecting the effects of pharmacological agents on recombinant catalytic domain of EphA2 Kinase.

Target Species

Human

Usage

For research use only (RUO)

Storage

Upon receipt store all other components at 4°C; Do not expose reagents to excessive light

Kit Components

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Microplate: One microplate supplied ready to use, with 96 wells (12 strips of 8-wells) in a foil, zip-lock bag with a desiccant pack. Wells are coated with recombinant "Tyrosine kinase-substrate-1". 10X Wash Buffer: One 100 mL bottle of 10X buffer containing 2% Tween-20. Kinase Buffer: One 20 mL bottle of 1X buffer used for Kinase Reaction Buffer and sample dilution. 20X ATP: Lyophilized ATP Na₂ salt. Reconstitute contents of vial with 2.0 mL of H₂O. Mix gently until dissolved. Final concentration of ATP should be 1.25 mM ATP. The ATP solution can be stored in small aliquots (e.g. 100 µL) at -20°C. The 1 mM ATP stock solution must be diluted to 62.5 µM in Kinase Reaction Buffer at the time of the assay. HRP conjugated Detection Antibody: One bottle containing 12 mL of HRP (horseradish peroxidase) conjugated anti-phosphotyrosine monoclonal antibody (PY-39). Substrate Reagent: One bottle containing 20 mL of the chromogenic substrate, tetra-methylbenzidine (TMB). Ready to use. Stop Solution: One bottle supplied ready to use, containing 20 mL of 1 N H₂SO₄. Ready to use.
