

# 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

Tel: 1-631-559-9269 1-516-512-3133

Fax: 1-631-938-8127

Email: [info@creative-biomart.org](mailto:info@creative-biomart.org)

45-1 Ramsey Road, Shirley, NY 11967, USA

## EphA2 Kinase (Human) Assay/Inhibitor Screening Assay Kit

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 Na<sub>2</sub> salt. Reconstitute contents of vial with 2.0 mL of H<sub>2</sub>O. 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 H<sub>2</sub>SO<sub>4</sub>. Ready to use.