

Met Kinase (Human) Assay/Inhibitor Screening Assay Kit

Product Information

Cat.No.

Kit-0550

Product Overview

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

Description

The MET protooncogene was discovered because of the ability of oncogenic Met to mediate chemically induced transformation of a human osteogenic sarcoma cell line. This receptor tyrosine kinase is synthesized as a single-chain precursor, which undergoes intracellular proteolytic cleavage at a basic amino acid site, yielding a disulfide-linked heterodimer. Its C-terminal, intracellular region contains a multifunctional docking site that binds to various signaling molecules. The ligand of the Met receptor is HGF/scatter factor, known to stimulate invasive growth of epithelial cells. It is a multifunctional factor affecting a number of cell targets including epithelium, endothelium, myoblasts, spinal motor neurons, and hematopoietic cells. Signaling pathways activated by the HGF-Met interaction mediate cell adhesion and motility. These cellular phenotypes, coupled to tightly regulated changes in cell growth, morphology, and survival, define a general pattern of invasive growth that occurs widely in normal development.

Applications

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

Target Species

Human

Usage

Met Kinase (Human) Assay/Inhibitor Screening Assay Kit

For research use only (RUO)

Storage

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

Kit Components

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 1.6 mL of ddH₂O. 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 12 mL of the chromogenic substrate, tetra-methylbenzidine (TMB). Ready to use. Stop Solution: One bottle supplied ready to use, containing 12 mL of 1.25 N H₂SO₄. Ready to use.
