Datasheet for ABIN1672788

c-MET ELISA Kit

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Overview

Quantity:	96 tests
Target:	c-MET (MET)
Binding Specificity:	AA 25-307, AA 308-932
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	62.5-4000 pg/mL
Minimum Detection Limit:	62.5 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Human C-MET/HGFR
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA)
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: NSO Immunogen sequence: E25-R307(alpha)&S308-T932(beta)
Specificity:	Expression system for standard: NSO Immunogen sequence: E25-R307(alpha)&S308-T932(beta)
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

Product Details

Sensitivity:	<5pg/mL
Material not included:	Microplate reader in standard size. Automated plate washer. Adjustable pipettes and pipette tips. Multichannel pipettes are recommended in the condition of large amount of samples in the detection. Clean tubes and Eppendorf tubes. Washing buffer (neutral PBS or TBS). Preparation of 0.01M TBS: Add 1.2g Tris, 8.5g Nacl

Target Details

Target:	c-MET (MET)
Alternative Name:	MET (MET Products)
Background:	Protein Function: Receptor tyrosine kinase that transduces signals from the extracellular matrix into the cytoplasm by binding to hepatocyte growth factor/HGF ligand. Regulates many physiological processes including proliferation, scattering, morphogenesis and survival. Ligand binding at the cell surface induces autophosphorylation of MET on its intracellular domain that provides docking sites for downstream signaling molecules. Following activation by ligand, interacts with the PI3-kinase subunit PIK3R1, PLCG1, SRC, GRB2, STAT3 or the adapter GAB1. Recruitment of these downstream effectors by MET leads to the activation of several signaling cascades including the RAS-ERK, PI3 kinase-AKT, or PLCgamma-PKC. The RAS-ERK activation is associated with the morphogenetic effects while PI3K/AKT coordinates prosurvival effects. During embryonic development, MET signaling plays a role in gastrulation, development and migration of muscles and neuronal precursors, angiogenesis and kidney formation. In adults, participates in wound healing as well as organ regeneration and tissue remodeling. Promotes also differentiation and proliferation of hematopoietic cells. Background: C-Met(MET or MNNG HOS Transforming gene) is a proto-oncogene that encodes a protein known as hepatocyte growth factor receptor(HGFR). MET proto-oncogene has a total length of 125,982 bp, and it is located in the 7q31 locus of chromosome 7. MET is a membrane receptor that is essential for embryonic development and wound healing. Activation of MET triggers mitogenesis, and morphogenesis. Synonyms: Hepatocyte growth factor receptor,HGF receptor,2.7.10.1,HGF/SF receptor,Proto-oncogene c-Met,Scatter factor receptor,SF receptor,Tyrosine-protein kinase Met,MET, Full Gene Name: Hepatocyte growth factor receptor Cellular Localisation: Membrane, Single-pass type I membrane protein.
Gene ID:	4233
UniProt:	P08581

Target Details

Pathways:	RTK Signaling, Carbohydrate Homeostasis, Synaptic Membrane, Signaling of Hepatocyte Growth Factor Receptor

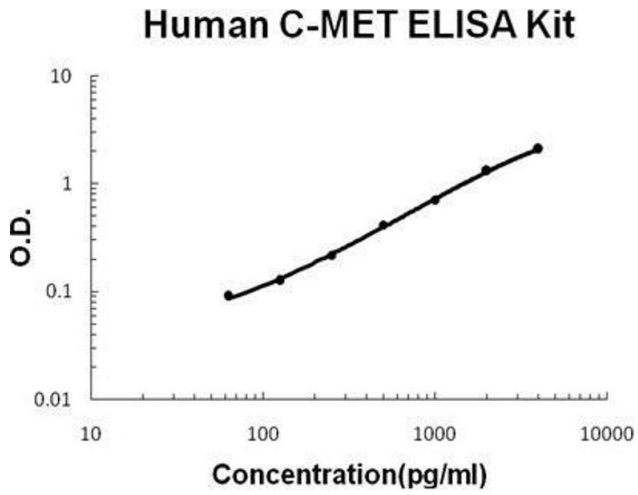
Application Details

Application Notes:	Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well assay was recommended for both standard and sample testing.
Comment:	Sequence similarities: Belongs to the protein kinase superfamily. Tyr protein kinase family. Tissue Specificity: Expressed in normal hepatocytes as well as in epithelial cells lining the stomach, the small and the large intestine. Found also in basal keratinocytes of esophagus and skin. High levels are found in liver, gastrointestinal tract, thyroid and kidney. Also present in the brain. .
Plate:	Pre-coated
Protocol:	human C-MET ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for C-MET has been precoated onto 96-well plates. Standards(NSO, E25-R307 (α) &S308-T932(β)) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for C-MET is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex was added and unbound conjugates were washed away with PBS or TBS buffer. HRP substrate TMB was used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the human C-MET amount of sample captured in plate.
Assay Procedure:	Aliquot 0.1 mL per well of the 4000pg/mL, 2000pg/mL,1000pg/mL, 500pg/mL, 250pg/mL, 125pg/mL, 62.5pg/mL human C-MET standard solutions into the precoated 96-well plate. Add 0.1 mL of the sample diluent buffer into the control well (Zero well). Add 0.1 mL of each properly diluted sample of human cell culture supernates, serum or plasma(heparin, EDTA) to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each human C-MET standard solution and each sample be measured in duplicate.
Assay Precision:	• Sample 1: n=16, Mean(ng/ml): 0.54, Standard deviation: 0.028, CV(%): 5.2 • Sample 2: n=16, Mean(ng/ml): 1.51, Standard deviation: 0.077, CV(%): 5.1 • Sample 3: n=16, Mean(ng/ml): 2.4, Standard deviation: 0.108, CV(%): 4.5, • Sample 1: n=24, Mean(ng/ml): 0.49, Standard deviation: 0.03, CV(%): 6.1 • Sample 2: n=24, Mean(ng/ml): 1.6, Standard deviation: 0.118, CV(%): 7.4 • Sample 3: n=24, Mean(ng/ml): 2.6, Standard deviation: 0.174, CV(%): 6.7
Restrictions:	For Research Use only

Handling

Handling Advice:	Avoid multiple freeze-thaw cycles.
Storage:	-20 °C,4 °C
Storage Comment:	Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles
Expiry Date:	12 months

Images



ELISA

Image 1. Human C-MET/HGFR PicoKine ELISA Kit standard curve