Datasheet for ABIN2859322
HGF ELISA Kit

1	Image

1	Publication

Overview

Quantity:	96 tests
Target:	HGF
Binding Specificity:	AA 33-495, AA 496-728
Reactivity:	Mouse
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 Mouse HGF
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (EDTA), Plasma (citrate)
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: NSO Immunogen sequence: Q33-R495 (alpha)&V496-L728 (beta)
Specificity:	Expression system for standard: NSO Immunogen sequence: Q33-R495 (i±)&V496-L728 (i²)
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

Product Details

Sensitivity:	<10pg/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:	HGF
Alternative Name:	HGF (HGF Products)
Background:	Protein Function: Potent mitogen for mature parenchymal hepatocyte cells, seems to be a hepatotrophic factor, and acts as a growth factor for a broad spectrum of tissues and cell types. Activating ligand for the receptor tyrosine kinase MET by binding to it and promoting its dimerization. .
	Background: Hepatocyte growth factor(HGF) is the most potent mitogen for mature parenchymal hepatocytes in primary culture, and seems to be a hepatotrophic factor that acts as a trigger for liver regeneration after partial hepatectomy and liver injury. HGF has a relative molecular mass(Mr) of 82,000 and is a heterodimer composed of a large alpha-subunit of Mr 69,000 and a small beta-subunit of Mr 34,000. The protein consists of 728 amino acid residues, including a possible signal peptide at the N-terminus. HGF may serve as a paracrine mediator to control placental development and growth. This growth factor may play an important role as a paracrine mediator of the proliferation of melanocytes and endothelial cells, as well as cells of epithelial origin. The gene encoding the human HGF is assigned to human chromosome 7. Synonyms: Hepatocyte growth factor,Hepatopoietin-A,Scatter factor,SF,Hepatocyte growth factor alpha chain,Hepatocyte growth factor beta chain,Hgf,
	Full Gene Name: Hepatocyte growth factor
Gene ID:	15234
UniProt:	Q08048
Pathways:	RTK Signaling, Carbohydrate Homeostasis, Glycosaminoglycan Metabolic Process, Synaptic Membrane, Signaling of Hepatocyte Growth Factor Receptor

Application Details

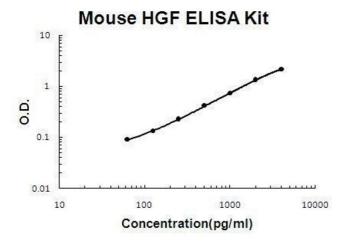|	
Application Notes:	Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well assay was recommended for both standard and sample testing.

Application Details

Comment:	Sequence similarities: Belongs to the peptidase S1 family. Plasminogen subfamily.
Plate:	Pre-coated
Protocol:	mouse HGF ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from rat specific for HGF has been precoated onto 96-well plates. Standards(NS0,Q33-R495 (α) & V496 - L728 (β)) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for HGF 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 mouse HGF 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 mouse HGF 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 mouse cell culture supernates, serum or plasma(EDTA, citrate) to each empty well. See "Sample Dilution Guideline" above for details. We recommend that each mouse HGF standard solution and each sample is measured in duplicate.
Assay Precision:	• Sample 1: n=16, Mean(pg/ml): 427, Standard deviation: 17.93, CV(%): 4.2 • Sample 2: n=16, Mean(pg/ml): 1523, Standard deviation: 76.15, CV(%): 5.0 • Sample 3: n=16, Mean(pg/ml): 3342, Standard deviation: 187.15, CV(%): 5.6, • Sample 1: n=24, Mean(pg/ml): 501, Standard deviation: 37.58, CV(%): 7.5 • Sample 2: n=24, Mean(pg/ml): 1756, Standard deviation: 136.97, CV(%): 7.8 • Sample 3: n=24, Mean(pg/ml): 3471, Standard deviation: 284.62, CV(%): 8.2
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

Publications

Product cited in:	Secchiero, Corallini, Zavan, Tripodo, Vindigni, Zauli: "Mesenchymal stem cells display hepato-

Publications

protective activity in lymphoma bearing xenografts." in: **Investigational new drugs**, Vol. 30, Issue 2, pp. 803-7, (2012) (PubMed).

Images

ELISA

Image 1. Mouse HGF PicoKine ELISA Kit standard curve