



Human hepatocyte growth factor,HGF ELISA kit

Product Code	CSB-E04573h
Abbreviation	HGF
Target Name	hepatocyte growth factor (hepapoietin A; scatter factor)
Uniprot No.	P14210
Alias	DFNB39, F-TCF, HGFB, HPTA, SF, OTTHUMP00000206710 fibroblast-derived tumor cytotoxic factor hepatocyte growth factor lung fibroblast-derived mitogen
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Sample Types	serum, plasma, tissue homogenates
Detection Range	15.6 pg/mL-1000 pg/mL
Sensitivity	3.9 pg/mL
Assay Time	1-5h
Sample Volume	50-100ul
Detection Wavelength	450 nm
Lead Time	3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx.
Research Area	Cancer
Gene Names	HGF
Tag Info	quantitative
Protein Description	Sandwich

Description

The human HGF ELISA kit (CSB-E04573h) is designed for the quantitative measurement of human HGF protein in serum, plasma, or tissue homogenates. It quantitates human HGF with 3.9 pg/ml sensitivity and shows excellent specificity for human HGF. It uses the bi-antibody sandwich enzyme immunoassay technique. This assay employs a biotin-conjugated HGF antibody that recognizes the analyte bound by the immobilized HGF antibody, forming an antibody-analyte-antibody complex. The immune complex is further detected by avidin-conjugated HRP. The TMB solution is added into the wells and turns blue and finally turns yellow after the addition of the stop solution. Solution color develops in proportion to the amount of HGF in the sample. The O.D. value is measured using a microplate reader at 450 nm and is used to determine the concentration of the human HGF in the sample.

HGF is a cytokine with pleiotropic functions during wound healing and repair. In the bleomycin model of lung fibrosis, HGF was demonstrated to exert anti-fibrotic effects and associated with improved survival and proliferation of epithelial cells and reduction of myofibroblast accumulation. HGF can induce



epithelial-mesenchymal conversion of epithelial cells in culture, with the dissociated cells becoming highly motile. HGF/c-Met signaling pathway has been involved in different processes including development, organ regeneration, and cancer as well as in medulloblastoma pathogenesis.

Target Details

Hepatocyte growth factor regulates cell growth, cell motility, and morphogenesis by activating a tyrosine kinase signaling cascade after binding to the proto-oncogenic c-Met receptor. Hepatocyte growth factor is secreted by mesenchymal cells and acts as a multi-functional cytokine on cells of mainly epithelial origin. Its ability to stimulate mitogenesis, cell motility, and matrix invasion gives it a central role in angiogenesis, tumorigenesis, and tissue regeneration. It is secreted as a single inactive polypeptide and is cleaved by serine proteases into a 69-kDa alpha-chain and 34-kDa beta-chain. A disulfide bond between the alpha and beta chains produces the active, heterodimeric molecule. The protein belongs to the plasminogen subfamily of S1 peptidases but has no detectable protease activity. Alternative splicing of this gene produces multiple transcript variants encoding different isoforms.

Product Precision

Linearity

Recovery

Typical

Msds

```
{"0":{"fileurl":"https://www.cusabio.com/uploadfile/msds/MSDS CSB-E04573h.pdf","filename":"MSDS"}}
```