Cynomolgus HGF / Hepatocyte Growth Factor Protein

Catalog Number: 90286-CNAH

General Information

Gene Name Synonym:
HGF

Protein Construction:
A DNA sequence encoding the cynomolgus HGF (C9E9X5) (Met1-Ser728) was expressed.

Source: Cynomolgus

Expression Host: HEK293 Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE

Bio Activity:
1. Immobilized Cynomolgus HGF at 10 μg/ml (100 μl/well) can bind Cynomolgus MET-Fc (cat:90304-C02H), EC50 of Cynomolgus MET-Fc (cat:90304-C02H) is 0.04-0.09 μg/ml.

Endotoxin:
< 1.0 EU per μg of the protein as determined by the LAL method

Predicted N terminal: His 32

Molecular Mass:
The recombinant Cynomolgus HGF consists of 697 amino acids and has a calculated molecular mass of 79.6 KDa. It migrates as 89,58,34 and 32 KDa band in SDS-PAGE under reducing conditions.

Formulation:
Lyophilized from sterile PBS, pH 7.4.

Usage Guide

Stability & Storage:
Samples are stable for twelve months from date of receipt at -20°C to -80°C.

Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:
Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:

Protein Description

Hepatocyte growth factor, also known as HGF, contains 4 kringle domains, 1 PAN domain and 1 peptidase S1 domain. It belongs to the peptidase S1 family, plasminogen subfamily. Hepatocyte growth factor is secreted by mesenchymal cells 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. 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, 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. HGF is a potent mitogen for mature parenchymal hepatocyte cells, seems to be an hepatotrophic factor, and acts as growth factor for a broad spectrum of tissues and cell types. HGF has no detectable protease activity. Defects in hepatocyte growth factor are the cause of deafness autosomal recessive type 39. A form of profound prelingual sensorineural hearing loss. Sensorineural deafness results from damage to the neural receptors of the inner ear, the nerve pathways to the brain, or the area of the brain that receives sound information.

References