



Recombinant Protein Technical Manual

Recombinant Human HGFA Protein (His Tag)

RPES4673

Product Data:

Product SKU: RPES4673

Size: 10µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_001519.1

Protein Information:

Molecular Mass: 68.2 kDa

AP Molecular Mass: 34, 37, 65, 105 kDa

Tag: C-His

Bio-activity:

Purity: > 95 % as determined by reducing SDS-PAGE.

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

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile PBS, pH 7.4

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: HGFA;MGC138395;MGC138397;RP11-529E10.2

Immunogen Information:

Sequence: Met 1-Ser 655

Background:

HGF activator (HGFA) is a serum-derived serine protease and belongs to the peptidase family S1. HGFA is responsible for the conversion of hepatocyte growth factor (HGF), from the inactive single-chain precursor to the active heterodimeric form, which is a potent mitogen, motogen, and morphogen for liver cells, epithelial cells, and endothelial cells. HGFA is synthesized and secreted by the liver and circulates in the plasma as an inactive single-chain zymogen in normal states. The zymogen is cleaved by thrombin or thermolysin through the endoproteolytic process and forms an active heterodimer linked by a disulfide bond. In turn, the active protease can be inhibited by HGFA inhibitors (HAIs) including HAI and HAI-2. In addition, the HGFA zymogen acquires a strong affinity upon activation and thus may ensure the local action in tissue regeneration in liver, kidney and skin. It has been reported that activation of HGF is a critical limiting step in the HGF/SF-induced signaling pathway mediated by Met, and accordingly, aberrant expression of HGFA is implicated in tumorigenesis and progression.