

## Recombinant Human HGFA Protein (His Tag)

Catalog No. PKSH031681

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

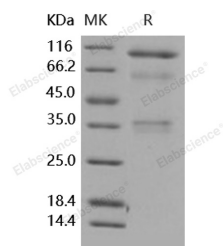
### Description

<b>Synonyms</b>	HGFA;MGC138395;MGC138397;RP11-529E10.2
<b>Species</b>	Human
<b>Expression Host</b>	HEK293 Cells
<b>Sequence</b>	Met 1-Ser 655
<b>Accession</b>	NP_001519.1
<b>Calculated Molecular Weight</b>	68.2 kDa
<b>Observed molecular weight</b>	34&37&65&105 kDa
<b>Tag</b>	C-His
<b>Bioactivity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Generally, 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.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from sterile PBS, pH 7.4 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 95 % as determined by reducing SDS-PAGE.

### 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

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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-1 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.