

## Active Recombinant Bovine HGF Protein, NK1 isoform, Animal-Free

**Cat. No.** HGF-03B    **Lot. No.** (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant bovine HGF protein is a potent, high-purity NK1 isoform of bovine hepatocyte growth factor (HGF). Animal-free (AOF) and carrier protein-free.
<b>Species</b>	Bovine
<b>Source</b>	E.coli
<b>Description</b>	Hepatocyte growth factor (HGF) regulates cell growth, cell motility, and morphogenesis and plays a central role in angiogenesis, tumorigenesis, and tissue regeneration. HGF binds and activates the receptor tyrosine kinase, c-Met, activating PI3K/AKT, FAK, JNK, and ERK1/2 signaling.
<b>Form</b>	Lyophilized from acetonitrile, TFA
<b>Molecular Mass</b>	20 kDa
<b>Endotoxin</b>	< 0.005 EU/μg protein (below level of detection)
<b>Purity</b>	> 98%, by SDS-PAGE quantitative densitometry
<b>Applications</b>	Differentiation of iPSCs to hepatocyte-like cells; iPSC and primary cell differentiation to muscle; Cellular agriculture and cultivated meat cell culture media optimization
<b>Reconstitution</b>	Resuspend in 10mM HCl at > 100 μg/mL (provided with protein and free of charge),

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prepare single use aliquots, add carrier protein if desired and store frozen at -20 or -80 centigrade

## GENE INFORMATION

**Gene Name** HGF hepatocyte growth factor [ *Bos taurus* (cattle) ]

**Official Symbol** HGF

**Synonyms** HGF; hepatocyte growth factor; hepatocyte growth factor; SF; hepapoietin A; hepatopoeitin-A; hepatopietin-A; scatter factor

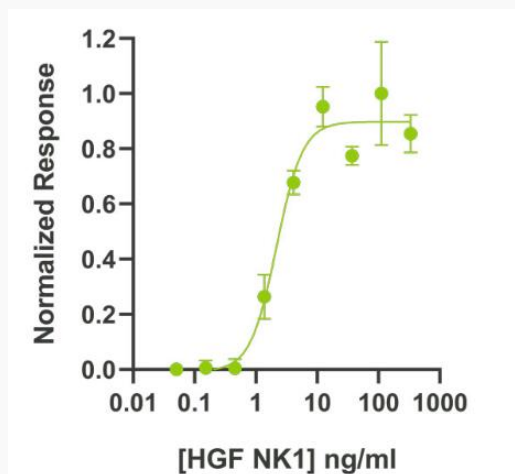
**Gene ID** 282879

**mRNA Refseq** NM\_001031751

**Protein Refseq** NP\_001026921

**UniProt ID** F1MZD6

**Bioactivity of Bovine hepatocyte growth factor**



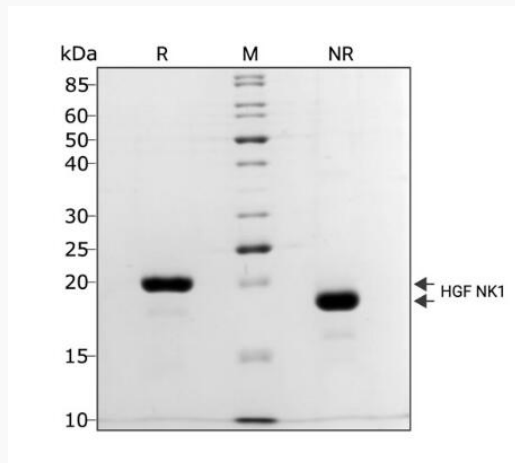
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HGF NK1 activity is determined using the Promega serum response element luciferase reporter assay in HEK293T cells. EC<sub>50</sub> = 2.0 ng/mL (96 pM). Cells are treated in triplicate with a serial dilution of HGF NK1 for 3 hours. Firefly luciferase activity is measured and normalized to the control Renilla luciferase activity. Please note: protein activity has been determined in a standardized assay using human cells.

### Purity



Recombinant bovine HGF protein migrates as a single band at 18 kDa in non-reducing (NR) conditions and 20 kDa upon reduction (R). Purified recombinant protein (3 µg) was resolved using 15% w/v SDS-PAGE in reduced (+β-mercaptoethanol, R) and non-reduced (NR) conditions and stained with Coomassie Brilliant Blue R250.