

## Anti-Human HGF Antibody [PSH03-78] - BSA and Azide free (Capture)

# HA722042



<b>Product Type:</b>	Recombinant Rabbit monoclonal IgG, primary antibodies
<b>Species reactivity:</b>	Human
<b>Applications:</b>	ELISA(Cap)
<b>Molecular Wt:</b>	Predicted band size: 83 kDa
<b>Clone number:</b>	PSH03-78

**Description:** HGF, also known as scatter factor and hepatopoietin A, is a pleiotropic protein in the plasminogen subfamily of S1 peptidases. It is a multidomain molecule that includes an N-terminal PAN/APPLE-like domain, four Kringle domains, and a serine proteinase-like domain that has no detectable protease activity. Human HGF is secreted as an inactive 728 amino acid (aa) single chain propeptide. It is cleaved after the fourth Kringle domain by a serine protease to form bioactive disulfide-linked HGF with a 60 kDa alpha and 30 kDa beta chain. Alternate splicing generates human HGF isoforms that lack the proteinase-like domain and different numbers of the Kringle domains. Human HGF shares 91%-94% aa sequence identity with bovine, canine, feline, mouse, and rat HGF. HGF binds heparan-sulfate proteoglycans and the widely expressed receptor tyrosine kinase, HGF R/c-MET. HGF-dependent c-MET activation is implicated in the development of many human cancers. HGF regulates epithelial morph.

**Immunogen:** Recombinant protein within Human HGF aa 32-728 (P14210).

**Positive control:** Recombinant Human HGF protein (HA210739).

**Subcellular location:** Extracellular region, extracellular space, membrane, platelet alpha granule lumen.

**Database links:** SwissProt: P14210 Human

**Recommended Dilutions:**

**ELISA(Cap)** Use at an assay dependent concentration. Can be paired for Sandwich ELISA with Rabbit monoclonal [PSH03-79] to Human HGF (Detector) (HA722043) and recombinant standard Human HGF (HA210739). The reference range value is 61.7-5000 pg/ml.

**Storage Buffer:** PBS (pH7.4).

**Storage Instruction:** Store at +4℃ after thawing. Aliquot store at -20℃. Avoid repeated freeze / thaw cycles.

**Purity:** Protein A affinity purified.

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Orders:0086-571-88062880

Technical:0086-571-89986345

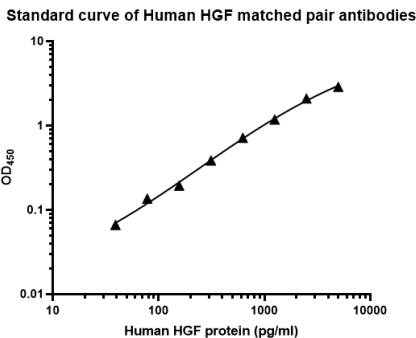
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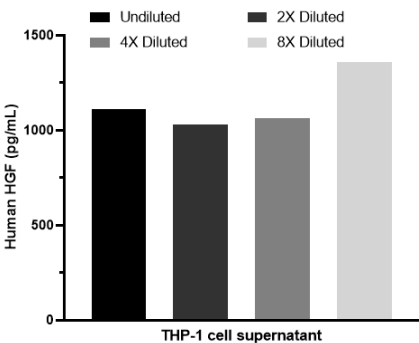
Applications:WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Cell=Immunofluorescence (Cell) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation

Images

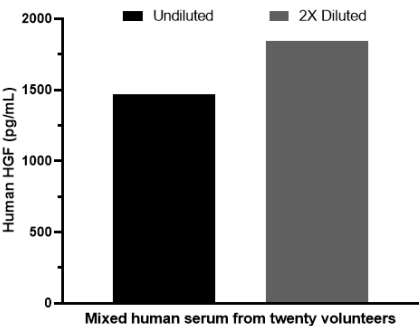
**Fig1:** Sandwich ELISA analysis of Human HGF matched pair antibodies



Elisa assay was performed by coating wells of a 96-well plate with 50  $\mu$ l per well of capture antibody HA722042 diluted in carbonate/bicarbonate buffer, at a concentration of 2  $\mu$ g/mL overnight at 4 $^{\circ}$ C. Wells of the plate were washed, blocked with 150  $\mu$ l 0.05% tween-20 1% BSA blocking buffer, and incubated with serial diluted Recombinant Human HGF protein (HA210739) starting from 5000 pg/ml to 0 pg/ml and detect antibody HA722043-Biotin (0.2  $\mu$ g/ml) for 1 hour at 30 $^{\circ}$ C with shaking. Then the plate was washed and incubated with 50  $\mu$ l per well of SA-HRP for 0.5 hour at 30 $^{\circ}$ C with shaking. Detection was performed using an Ultra TMB Substrate for 10 minutes at room temperature in the dark. The reaction was stopped with sulfuric acid and absorbances were read on a spectrophotometer at 450 nm.



**Fig2:** The concentrations of Human HGF were interpolated from the HGF standard curves and corrected for sample dilution. The mean HGF concentration was determined to be 1,141 pg/ml in THP-1 cell supernatant.



**Fig3:** The concentrations of Human HGF were interpolated from the HGF standard curves and corrected for sample dilution. The mean HGF concentration was determined to be 1,657 pg/ml in mixed human serum from twenty volunteers.

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**Note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

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### Background References

1. Zhao Y et al. HGF/c-Met: A Key Promoter in Liver Regeneration. Front Pharmacol. 2022 Mar
2. Pothula SP et al. Targeting HGF/c-MET Axis in Pancreatic Cancer. Int J Mol Sci. 2020 Dec

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