

#### **HGF Antibody (C-term)**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP1724B

#### Specification

## HGF Antibody (C-term) - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Antigen Region WB, IHC-P, FC,E <u>P14210</u> Human Rabbit Polyclonal Rabbit IgG 521-554

### HGF Antibody (C-term) - Additional Information

Gene ID 3082

**Other Names** Hepatocyte growth factor, Hepatopoietin-A, Scatter factor, SF, Hepatocyte growth factor alpha chain, Hepatocyte growth factor beta chain, HGF, HPTA

#### Target/Specificity

This HGF antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 521-554 amino acids from the C-terminal region of human HGF.

**Dilution** WB~~1:1000 IHC-P~~1:50~100 FC~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

HGF Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## HGF Antibody (C-term) - Protein Information

Name HGF

Synonyms HPTA



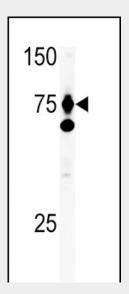
**Function** Potent mitogen for mature parenchymal hepatocyte cells, seems to be a hepatotrophic factor, and acts as a growth factor for a broad spectrum of tissues and cell types (PubMed:<u>20624990</u>). Activating ligand for the receptor tyrosine kinase MET by binding to it and promoting its dimerization (PubMed:<u>20977675</u>, PubMed:<u>15167892</u>). Activates MAPK signaling following TMPRSS13 cleavage and activation (PubMed:<u>20977675</u>).

### **HGF Antibody (C-term) - Protocols**

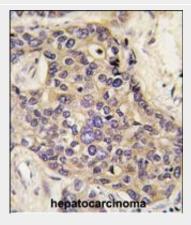
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

# HGF Antibody (C-term) - Images

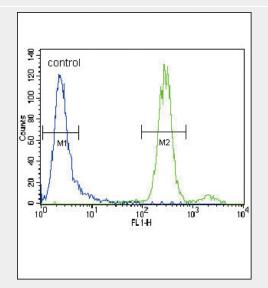


The anti-HGF Pab (Cat.# AP1724b) is used in Western blot to detect HGF in Ramos tissue lysate. HGF (arrow) was detected using the purified Pab.





Formalin-fixed and paraffin-embedded human hepatocarcinoma tissue reacted with HGF antibody (C-term) (Cat.#AP1724b), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



HGF Antibody (C-term) (Cat. #AP1724b) flow cytometric analysis of CEM cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

# HGF Antibody (C-term) - Background

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. Hepatocyte growth factor is secreted by mesenchymal cells 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, tumorogenesis, and tissue regeneration. It is secreted 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. The protein belongs to the plasminogen subfamily of S1 peptidases but has no detectable protease activity. Alternative splicing of this gene produces multiple transcript variants encoding different isoforms. Transcript Variant: This variant (1) encodes the longest isoform (1). To date, experimental evidence for cleavage of the proprotein into two mature chains has been shown only for isoform 1.

## HGF Antibody (C-term) - References

Ryugo, M., et al., Transplantation 78(8):1153-1158 (2004). Lyon, M., et al., J. Biol. Chem. 279(42):43560-43567 (2004). He, Y., et al., World J. Gastroenterol. 10(19):2827-2830 (2004). Tjin, E.P., et al., Blood 104(7):2172-2175 (2004). Matsuda-Hashii, Y., et al., Exp. Hematol. 32(10):955-961 (2004). **HGF Antibody (C-term) - Citations** 

- <u>Hepatocyte growth factor/cMET pathway activation enhances cancer hallmarks in</u> <u>adrenocortical carcinoma.</u>
- Activated platelets interfere with recruitment of mesenchymal stem cells to apoptotic cardiac cells via high mobility group box 1/Toll-like receptor 4-mediated down-regulation of hepatocyte growth factor receptor MET.