



Anti-human HGF

20140423BB



FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	102-PA62S
Size:	100 µg
Lot. No.:	According to product label
Country of origin:	Germany

Preparation: Produced from sera of rabbits immunized with highly pure recombinant human HGF [Gln32 – Ser728] produced in insect cells.

Target Background

Synonyms:	Hepatopoietin-A, Scatter factor
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Human Hepatocyte Growth Factor (HGF), also known as scatter factor, is a pleiotrophic cytokine that shows homology to the enzymes of the blood coagulation cascade. It stimulates the motility and invasion of several cancer cell types and can induce angiogenesis. Recently HGF was found to be identical to scatter factor, a fibroblast-derived factor promoting the dissociation of epithelial and vascular endothelial cell colonies in monolayer cell cultures by stimulating cell migration. HGF is synthesized as a biologically inactive single chain precursor, which is cleaved by a specific, extracellular serum serine protease to a fully active heterodimer. This mature, biologically active HGF consists of a disulfide-linked alpha-beta heterodimer of the two cleavage products. Previous studies have shown that single chain and heterodimeric HGF are equally active in *in vitro* assay systems due to either production of the serine protease in cell culture or the presence of the ubiquitous protease in serum. All biological responses induced by HGF are elicited by binding to its transmembrane tyrosine kinase receptor, which is encoded by the MET proto-oncogene. After autophosphorylation of the receptor different cytoplasmatic effectors are activated that bind to the same multifunctional docking site of the receptor. HGF function is essential for normal development. Recent studies have suggested that HGF synergizes with basic FGF in the induction of angiogenesis.

References

1. Fausto N. J Hepatol 32; 19-31, 2000
2. Lamszus K et al. Int J Dev Neurosci 17; 517-530, 1999
3. Stella MC and Comoglio PM. Int J Biochem Cell Biol 31; 1357-1367, 1999]

Database References Antigen

Protein RefSeq:	NP_000592
Uniprot ID:	P14210
mRNA RefSeq:	NM_000601

Product Specifications

Species reactivity	human
Clone/Ab feature	Rabbit IgG
Cross reactivity	ND
Host	rabbit
Clonality	polyclonal
Purification	Protein A purified
Immunogen	Recombinant human HGF (RT #300-011)
Formulation	lyophilized
Buffer	PBS

Stability: The lyophilized antibody is stable at room temperature for up to 1 month. The reconstituted antibody is stable for at least two weeks at 2-8°C. Frozen aliquots are stable for at least 6 months when stored at -20°C.

Reconstitution: Centrifuge vial prior to opening. Reconstitute in sterile water to a concentration of 0.1-1.0 mg/ml.



AVOID REPEATED FREEZE AND THAW CYCLES!

Applications

ELISA: Use 1-5 µg/ml (functional)
Western Blot: Use at 1-5 µg/ml

NOTE: OPTIMAL DILUTIONS SHOULD BE DETERMINED BY EACH LABORATORY FOR EACH APPLICATION!



Anti-human HGF

Handling/Applications

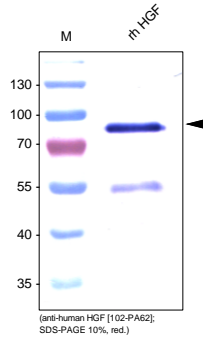


Figure 1. Western analysis of recombinant human HGF [Cat# 300-010] using an anti-human HGF antibody [Cat# 102-PA62] directed against human HGF produced in insect cells. The SDS-PAGE was run under reducing conditions.

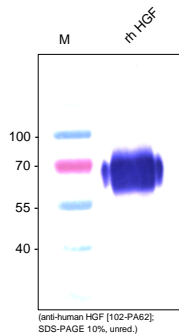


Figure 2. Western analysis of recombinant human HGF [Cat# 300-010] using an anti-human HGF antibody [Cat# 102-PA62] directed against human HGF produced in insect cells. The SDS-PAGE was run under non-reducing conditions.

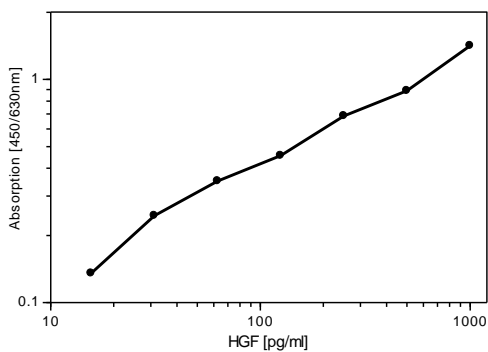


Figure 3: Functional ELISA with anti-human HGF [Cat# 102-PA62S]. Recombinant human HGF [Cat# 300-010] was coated with increasing amounts on a 96 well microtiter plate.