

Datasheet for ABIN1589815 **anti-HGF antibody**



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Overview

Quantity:	100 µg
Target:	HGF
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This HGF antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Purpose:	HGF antibody
Immunogen:	Recombinant human HGF
Isotype:	IgG
Specificity:	Recombinant human HGF
Characteristics:	Chromosomal location: 7q21.1 Produced from sera of rabbits immunised with highly pure recombinant human HGF produced in insect cells. 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,

Product Details

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. Hepatocytes have to be primed before they can fully respond to HGF. This priming requires cytokines as TNF and IL-6. Recent studies have suggested that HGF synergizes with basic FGF in the induction of angiogenesis.

Purification: Protein A purified

Target Details

Target: HGF

Alternative Name: HGF ([HGF Products](#))

Background: HGF, SF, HGFB, HPTA, F-TCF, DFNB39, HGF is a mesenchymally derived potent mitogen for mature parenchymal hepatocyte cells and acts as a growth factor for a broad spectrum of tissues and cell types. HGF signals through a transmembrane tyrosine kinase receptor known as MET. Activities of HGF include induction of cell proliferation, motility, morphogenesis, inhibition of cell growth, and enhancement of neuron survival. HGF is a crucial mitogen for liver regeneration processes, especially after partial hepatectomy and other liver injuries. Human and murine HGF are cross-reactive. Human HGF is expressed as a linear 697 amino acid polypeptide precursor glycoprotein. Proteolytic processing of this precursor generates the biologically active form of HGF, which consists of two polypeptide chains (α -chain and β -chain) held by a single disulfide bond resulting in formation of a biologically active heterodimer. The α -chain consists of 463 amino acid residues and four kringle domains. The β -chain consists of 234 amino acid residues.

Gene ID: 3082

NCBI Accession: [NM_000601](#), [NP_000592](#)

UniProt: [P14210](#)

Pathways: [RTK Signaling](#), [Carbohydrate Homeostasis](#), [Glycosaminoglycan Metabolic Process](#), [Synaptic Membrane](#), [Signaling of Hepatocyte Growth Factor Receptor](#)

Application Details

Application Notes:	Western Blot: Use 1-5 µg/mL
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Centrifuge vial prior to opening. Reconstitute in sterile water to a concentration of 0.1-1.0 mg/mL.
Buffer:	PBS
Handling Advice:	Centrifuge vial prior to opening.
Storage:	4 °C,-20 °C
Storage Comment:	The lyophilized antibody is stable for at least 2 years at -20°C. After sterile reconstitution the antibody is stable at 2-8°C for up to 6 months. Frozen aliquots are stable for at least 6 months when stored at -20°C. Addition of a carrier protein or 50% glycerol is recommended for frozen aliquots.
Expiry Date:	24 months