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HGF Antibody

Mouse Monoclonal Antibody (Mab)
Catalog # AM2064B

Product Information

Application	WB, E
Primary Accession	P14210
Other Accession	NP_000592.3
Reactivity	Human, Rat, Mouse
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Clone Names	489CT6.12.6
Calculated MW	83134
Antigen Region	521-554

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 mice immunized with a KLH conjugated synthetic peptide between 521-554 amino acids from human HGF.
Dilution	WB~~1:4000 E~~Use at an assay dependent concentration.
Format	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, 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 is for research use only and not for use in diagnostic or therapeutic procedures.

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:20624990). Activating ligand for the receptor tyrosine kinase MET by binding to it and promoting its dimerization (PubMed:15167892, PubMed:20977675). Activates MAPK signaling following TMPRSS13 cleavage and activation (PubMed:20977675).

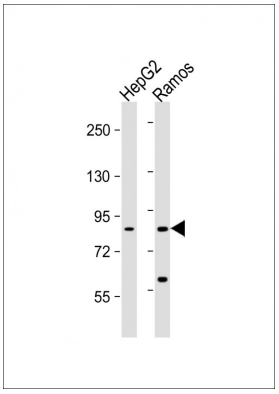
Background

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. [provided by RefSeq].

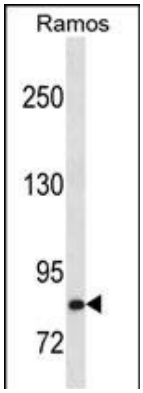
References

Shi, E., et al. Anesthesiology 113(5):1109-1117(2010)
Hoot, K.E., et al. J. Clin. Invest. 120(10):3606-3616(2010)
Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Togawa, A., et al. Biochem. Biophys. Res. Commun. 400(2):271-277(2010)
Li, F., et al. J. Biol. Chem. 285(36):27673-27685(2010)

Images



All lanes : Anti-Human HGF C-term at 1:1000 dilution Lane 1: HepG2 whole cell lysate Lane 2: Ramos whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 83 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



HGF Antibody (Cat. #AM2064b) western blot analysis in Ramos cell line lysates (35µg/lane).This demonstrates the HGF antibody detected the HGF protein (arrow).