

HGF α (H-145): sc-7949

BACKGROUND

Hepatocyte growth factor, or HGF, is a pleiotropic growth factor variously designated as scatter factor, hematopoietin A and mammary growth factor. HGF is synthesized as a single chain, 728 amino acid precursor with a 29 amino acid signal peptide which is not present in the mature protein. Biologically active HGF is composed of a disulfide linked α chain and a β chain, both of which are highly glycosylated. HGF exerts its biological effects through the HGF receptor, c-Met, which is expressed by normal hepatocytes, gastric and intestinal epithelium, ovarian and endometrial endothelium and in the basal layers of skin. While c-Met is not thought to be expressed in normal lung, thyroid or pancreatic tissue, c-Met has been detected in tumors originating from such tissue. The c-Met proto-oncogene encodes a 1,408 amino acid glycoprotein that represents the prototypic member of a novel family of receptor tyrosine kinases (RTKs) that include Ron, Sea and Sex.

CHROMOSOMAL LOCATION

Genetic locus: HGF (human) mapping to 7q21.11; Hgf (mouse) mapping to 5 A2.

SOURCE

HGF α (H-145) is a rabbit polyclonal antibody raised against amino acids 32-176 of HGF α of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

HGF α (H-145) is available conjugated to agarose (sc-7949 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP.

APPLICATIONS

HGF α (H-145) is recommended for detection of HGF α of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

HGF α (H-145) is also recommended for detection of HGF α in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for HGF α / β siRNA (h): sc-37111, HGF α / β siRNA (m): sc-37112, HGF α / β shRNA Plasmid (h): sc-37111-SH, HGF α / β shRNA Plasmid (m): sc-37112-SH, HGF α / β shRNA (h) Lentiviral Particles: sc-37111-V and HGF α / β shRNA (m) Lentiviral Particles: sc-37112-V.

Molecular Weight of HGF α : 69 kDa.

Positive Controls: c4 whole cell lysate: sc-364186.

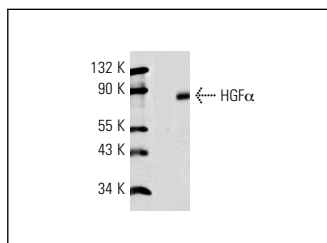
STORAGE

Store at 4 $^{\circ}$ C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

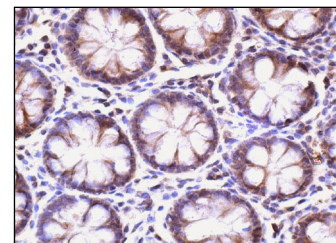
RESEARCH USE

For research use only, not for use in diagnostic procedures.

DATA



HGF α (H-145): sc-7949. Western blot analysis of human recombinant HGF.



HGF α (H-145): sc-7949. Immunoperoxidase staining of formalin fixed, paraffin-embedded human colon tissue showing cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

- Jiang, W.G., et al. 1999. Antagonistic effect of NK4, a novel hepatocyte growth factor variant, on *in vitro* angiogenesis of human vascular endothelial cells. *Clin. Cancer Res.* 5: 3695-3703.
- Honda, H., et al. 2010. Expression of HGF and IGF-1 during regeneration of masseter muscle in mdx mice. *J. Muscle Res. Cell Motil.* 31: 71-77.
- Onitsuka, T., et al. 2010. Acquired resistance to gefitinib: the contribution of mechanisms other than the T790M, MET, and HGF status. *Lung Cancer* 68: 198-203.
- Chowdhury, M., et al. 2010. A comparative study of carotid atherosclerotic plaque microvessel density and angiogenic growth factor expression in symptomatic versus asymptomatic patients. *Eur. J. Vasc. Endovasc. Surg.* 39: 388-395.
- Gaddy, D.F., et al. 2010. *In vivo* expression of HGF/NK1 and GLP-1 from dsAAV vectors enhances pancreatic β -cell proliferation and improves pathology in the db/db mouse model of diabetes. *Diabetes* 59: 3108-3116.
- Topcu-Yilmaz, P., et al. 2010. Correlation of clinicopathological parameters with HGF, c-Met, EGFR, and IGF-1R expression in uveal melanoma. *Melanoma Res.* 20: 126-132.
- Molhoek, K.R., et al. 2011. Comprehensive analysis of receptor tyrosine kinase activation in human melanomas reveals autocrine signaling through IGF-1R. *Melanoma Res.* 21: 274-284.
- Farhana, L., et al. 2011. Maximal adamantyl-substituted retinoid-related molecule-induced apoptosis requires NF κ B noncanonical and canonical pathway activation. *Cell Death Differ.* 18: 164-173.



Try **HGF α (H-10): sc-374422** or **HGF α (B-3): sc-166724**, our highly recommended monoclonal alternatives to HGF α (H-145). Also, for AC, HRP, FITC, PE, Alexa Fluor $^{\text{®}}$ 488 and Alexa Fluor $^{\text{®}}$ 647 conjugates, see **HGF α (H-10): sc-374422**.