SANTA CRUZ BIOTECHNOLOGY, INC.

HGFα (C-20): sc-1358

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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

HGFα (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of HGFα of human origin.

PRODUCT

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

HGFα (C-20) is available conjugated to agarose (sc-1358 AC), 500 µg/0.25 ml agarose in 1 ml, for IP.

Blocking peptide available for competition studies, sc-1358 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

HGFα (C-20) is recommended for detection of HGFα of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

HGFα (C-20) is also recommended for detection of HGFα in additional species, including equine, canine, bovine and porcine.

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

Molecular Weight of HGFα: 69 kDa.

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

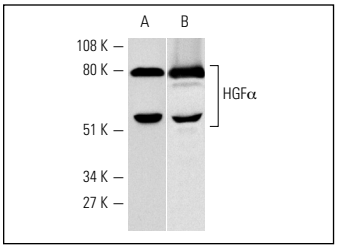
STORAGE

Store at 4° 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



Western blot analysis of human recombinant HGF (**A**,**B**). Antibodies tested include HGFα (C-20): sc-1358 (**A**) and HGFα (N-17): sc-1357 (**B**).

SELECT PRODUCT CITATIONS

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4. Conway, K., et al. 2007. Hepatocyte growth factor regulation: an integral part of why wounds become chronic. Wound Repair Regen. 15: 683-692.
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6. Zhao, Y., et al. 2010. Perfluorooctanoic acid effects on steroid hormone and growth factor levels mediate stimulation of peripubertal mammary gland development in C57BL/6 mice. Toxicol. Sci. 115: 214-224.
7. Maroni, P., et al. 2011. Nuclear co-localization and functional interaction of COX-2 and HIF-1α characterize bone metastasis of human breast carcinoma. Breast Cancer Res. Treat. 129: 433-450.
8. Zhao, Y., et al. 2012. Perfluorooctanoic acid effects on ovaries mediate its inhibition of peripubertal mammary gland development in Balb/c and C57Bl/6 mice. Reprod. Toxicol. 33: 563-576.