

HGFA-S (C-14): sc-1373

BACKGROUND

Hepatocyte growth factor (HGF) is a pleiotropic growth factor variously designated 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 a chain and a b chain, both of which are highly glycosylated. HGF exerts its biological effects through the HGF receptor, c-Met, which is expressed in ovary and endometrial endothelium and in the basal layers of skin. Hepatocyte growth factor activator (HGFA) is a serine protease which functions to cleave single chain HGF to its active heterodimeric form. HGFA is specific to the liver. HGFA of human origin is synthesized as an inactive secreted 655 amino acid precursor which is activated to generate a heterodimer consisting of a 35 amino acid short chain and a 248 amino acid long chain linked together by a disulfide bond. The gene encoding HGFA maps to human chromosome 4p16.

CHROMOSOMAL LOCATION

Genetic locus: HGFA (human) mapping to 4p16; Hgfac (mouse) mapping to 5 B2.

SOURCE

HGFA-S (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of HGFA-S 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.

Blocking peptide available for competition studies, sc-1373 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

HGFA-S (C-14) is recommended for detection of HGFA short chain 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)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

HGFA-S (C-14) is also recommended for detection of HGFA short chain in additional species, including canine, bovine, porcine and avian.

Suitable for use as control antibody for HGFA siRNA (h): sc-39568, HGFA siRNA (m): sc-39569, HGFA shRNA Plasmid (h): sc-39568-SH, HGFA shRNA Plasmid (m): sc-39569-SH, HGFA shRNA (h) Lentiviral Particles: sc-39568-V and HGFA shRNA (m) Lentiviral Particles: sc-39569-V.

Molecular Weight of HGFA precursor: 82 kDa.

Molecular Weight of HGFA-L: 31 kDa.

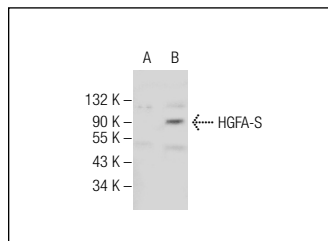
Molecular Weight of HGFA-S: 5 kDa.

Positive Controls: HGFA (m): 293T Lysate: sc-120765.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



HGFA-S (C-14): sc-1373. Western blot analysis of HGFA expression in non-transfected: sc-117752 (A) and mouse HGFA transfected: sc-120765 (B) 293T whole cell lysates.

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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **HGFA (B-6): sc-515126**, our highly recommended monoclonal alternative to HGFA-S (C-14).