SANTA CRUZ BIOTECHNOLOGY, INC.

HGFL (T-19): sc-6090

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Hepatocyte growth factor, or HGF, is a pleiotropic growth factor variously referred to as scatter factor, hematopoietin A and mammary growth factor. Biologically active HGF is composed of a disulfide linked a chain and a β chain, both of which are highly glycosylated. A related protein, hepatocyte growth factor-like protein (HGFL), shares structural similarity to HGF. Also referred to as macrophage-stimulating protein, or MSP, HGFL is a mediator of the inflammatory response and is required to evoke the chemotactic response of peritoneal macrophages. This is in contrast to HGF, which is primarily associated with the growth and differentiation of the epithelia and endothelia. The receptor tyrosine kinase Ron, exhibits a high degree of homology with the HGF receptor c-Met, and is expressed by several epithelial tissues as well as by granulocytes and monocytes. Although HGF stimulation has no effect on Ron tyrosine kinase activity, in epithelial cells HGFL induces the autophosphorylation of Ron which is followed by DNA synthesis. This data suggests Ron to be the *in vivo* HGFL receptor.

CHROMOSOMAL LOCATION

Genetic locus: Mst1 (mouse) mapping to 9 F2.

SOURCE

HGFL (T-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of HGFL of mouse 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-6090 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

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

APPLICATIONS

HGFL (T-19)is recommended for detection of HGFL α of mouse and, to a lesser extent, rat 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), 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).

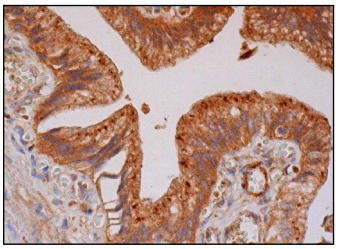
Suitable for use as control antibody for HGFL siRNA (m): sc-39571, HGFL shRNA Plasmid (m): sc-39571-SH and HGFL shRNA (m) Lentiviral Particles: sc-39571-V.

Molecular Weight of HGFL: 80 kDa.

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



HGFL (T-19): sc-6090. Immunoperoxidase staining of formalin fixed, paraffin-embedded human gall bladder tissue showing cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

1. Cowin, A.J., et al. 2001. Hepatocyte growth factor and macrophage-stimulating protein are upregulated during excisional wound repair in rats. Cell Tissue Res. 306: 239-250.
2. Tsutsui, S., et al. 2005. RON-regulated innate immunity is protective in an animal model of multiple sclerosis. Ann. Neurol. 57: 883-895.
3. Rampino, T., et al. 2007. Neutralization of macrophage-stimulating protein ameliorates renal injury in anti-thy 1 glomerulonephritis. J. Am. Soc. Nephrol. 18: 1486-1496.
4. Stuart, W.D., et al. 2011. Ron receptor regulates Kupffer cell-dependent cytokine production and hepatocyte survival following endotoxin exposure in mice. Hepatology 53: 1618-1628.
5. Gurusamy, D., et al. 2014. Hepatocyte growth factor-like protein is a positive regulator of early mammary gland ductal morphogenesis. Mech. Dev. 133: 11-22.
6. Vasiliauskas, J., et al. 2014. Hepatocyte growth factor-like protein is required for prostate tumor growth in the TRAMP mouse model. Oncotarget 5: 5547-5558.

RESEARCH USE

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