SANTA CRUZ BIOTECHNOLOGY, INC.

HAI-1 (H-180): sc-30205

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Tissue damage, such as hepatic and renal injury, initiates hepatocyte growth factor activator (HGFAC)-mediated limited proteolytic activation of the inactive single-chain precursor form of HGF. Initially, HGFAC is produced as a precursor protein, which is activated by limited proteolysis and is neutralized by specific inhibitors known as HGF activator inhibitors, designated HAIs. HAIs belong to the Kunitz-type serine protease inhibitor family. HAIs target HGF activator and are involved in the regulation of proteolytic activation of HGF in injured tissues. Human HAI-1 transcript is expressed in various human tissues, such as adult placenta, kidney, pancreas, prostate and small intestine, and fetal kidney and lung. It translates into a 478 amino acid protein. The human HAI-2 gene maps to chromosome 19q13.1 and encodes a 252 amino acid protein, also designated human placental bikunin or kop (Kunitz domain containing protein over-expressed in pancreatic cancer). HAI-1 and HAI-2 are produced in membrane-associated forms, which are secreted as active, proteolytically truncated proteins.

CHROMOSOMAL LOCATION

Genetic locus: SPINT1 (human) mapping to 15q15.1; Spint1 (mouse) mapping to 2 E5.

SOURCE

HAI-1 (H-180) is a rabbit polyclonal antibody raised against amino acids 36-215 mapping near the N-terminus of HAI-1 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.

RESEARCH USE

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

APPLICATIONS

HAI-1 (H-180) is recommended for detection of HAI-1 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).

HAI-1 (H-180) is also recommended for detection of HAI-1 in additional species, including equine.

Suitable for use as control antibody for HAI-1 siRNA (h): sc-39554, HAI-1 siRNA (m): sc-39555, HAI-1 shRNA Plasmid (h): sc-39554-SH, HAI-1 shRNA Plasmid (m): sc-39555-SH, HAI-1 shRNA (h) Lentiviral Particles: sc-39554-V and HAI-1 shRNA (m) Lentiviral Particles: sc-39555-V.

Molecular Weight of HAI-1 precursor: 58 kDa.

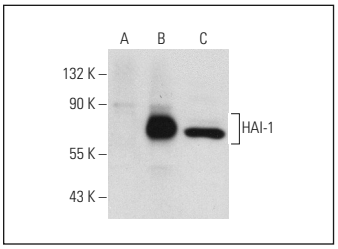
Molecular Weight of Δ HAI-1: 40 kDa.

Positive Controls: HAI-1 (m): 293T Lysate: sc-126932, human platelet extract: sc-363773 or HAI-1 (h3): 293T Lysate: sc-159178.

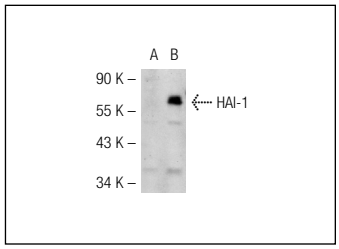
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



HAI-1 (H-180): sc-30205. Western blot analysis of HAI-1 expression in non-transfected: sc-117752 (**A**) and human HAI-1 transfected: sc-159178 (**B**) 293T whole cell lysates and human platelet extract (**C**).



HAI-1 (H-180): sc-30205. Western blot analysis of HAI-1 expression in non-transfected: sc-117752 (**A**) and mouse HAI-1 transfected: sc-126932 (**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.

PROTOCOLS

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

MONOS Satisfaction Guaranteed

Try **HAI-1 (H-1): sc-137159** or **HAI-1 (C-4): sc-137160**, our highly recommended monoclonal alternatives to HAI-1 (H-180).