SANTA CRUZ BIOTECHNOLOGY, INC.

fetuin-A (H-300): sc-28924

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Fetuin (also designated α-2-Z-globulin or α-2-HS-glycoprotein) is a secreted plasma protein that is expressed in hepatocytes, monocyte/macrophages and bone and is downregulated during injury and inflammation. Fetuin preferentially binds to and carries calcium and barium ions in the blood, where it is thought to mediate serum calcium homeostasis and mineralization, and to potentially participate in the transport of bioactive molecules. Additionally, fetuin has been shown to function as an acute phase anti-inflammatory mediator that is critical to regulating the innate immune response following tissue injury. During inflammation, circulating fetuin levels substantially decrease as fetuin becomes associated with the membranes of macrophages. This membrane associated form of fetuin acts as an opsonic participant by potentiating the entry of cationic small molecules into the activated macrophage, which in turn facilitates macrophage-deactivating mechanisms. Biologically active fetuin is derived from a precursor protein that is cleaved at the amino-terminus to generate two chains held together by a single disulfide bond.

CHROMOSOMAL LOCATION

Genetic locus: AHSG (human) mapping to 3q27.3; Ahsg (mouse) mapping to 16 B1.

SOURCE

fetuin-A (H-300) is a rabbit polyclonal antibody raised against amino acids 68-367 of fetuin-A 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.

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.

APPLICATIONS

fetuin-A (H-300) is recommended for detection of fetuin-A of human and, to a lesser extent, mouse and 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for fetuin-A siRNA (h): sc-39442, fetuin-A siRNA (m): sc-39443, fetuin-A shRNA Plasmid (h): sc-39442-SH, fetuin-A shRNA Plasmid (m): sc-39443-SH, fetuin-A shRNA (h) Lentiviral Particles: sc-39442-V and fetuin-A shRNA (m) Lentiviral Particles: sc-39443-V.

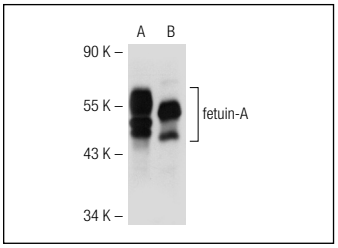
Molecular Weight of fetuin-A: 59 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, human plasma lysate: sc-364374 or human PBL whole cell lysate.

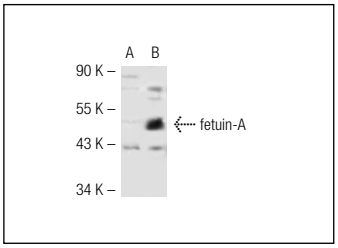
RECOMMENDED SECONDARY REAGENTS

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



fetuin-A (H-300): sc-28924. Western blot analysis of fetuin-A expression in Hep G2 (**A**) and human PBL (**B**) whole cell lysates.



fetuin-A (H-300): sc-28924. Western blot analysis of fetuin-A expression in non-transfected: sc-117752 (**A**) and mouse fetuin-A transfected: sc-120237 (**B**) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

1. Jarkovska, K., et al. 2011. Development of ovarian hyperstimulation syndrome: interrogation of key proteins and biological processes in human follicular fluid of women undergoing *in vitro* fertilization. Mol. Hum. Reprod. 17: 679-692.
2. Pal, D., et al. 2012. Fetuin-A acts as an endogenous ligand of TLR4 to promote lipid-induced Insulin resistance. Nat. Med. E-published.

PROTOCOLS

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