SANTA CRUZ BIOTECHNOLOGY, INC.

ADAM7 (K-19): sc-25142

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The ADAM (a disintegrin and metalloprotease) protein family, which includes over 30 membrane-anchored, glycosylated, Zn^{2+} dependent proteases, plays a role in cell-cell and cell-matrix interface related processes, including fertilization, muscle fusion, secretion of TNFα (tumor necrosis factor α), and modulation of the neurogenic function of Notch and Delta. The ADAM proteins possess a signal-domain, a pro-domain, a metalloprotease domain, a disintegrin domain (Integrin ligand), a cysteine-rich region, an epidermal growth factor-like domain, a transmembrane domain and a cytoplasmic tail. ADAMs are expressed in a wide range of mammalian tissues and several are abundantly expressed in the male reproductive tract. ADAM7, also designated GP-83, binds wheat germ agglutinin (WGA), and is synthesized as a protein and secreted by corpus and cauda epididymus. ADAM7 conjugates to spermatozoa during their transit in human epididymus, and may be involved in sperm maturation.

REFERENCES

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7. Lin, Y.C., Sun, G.H., Lee, Y.M., Guo, Y.W. and Liu, H.W. 2001. Cloning and characterization of a complementary DNA encoding a human epididymis-associated disintegrin and metalloprotease 7 protein. Biol. Reprod. 65: 944-950.

CHROMOSOMAL LOCATION

Genetic locus: ADAM7 (human) mapping to 8p21.2.

SOURCE

ADAM7 (K-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ADAM7 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-25142 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ADAM7 (K-19) is recommended for detection of ADAM7 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 ADAM7 siRNA (h): sc-41404, ADAM7 shRNA Plasmid (h): sc-41404-SH and ADAM7 shRNA (h) Lentiviral Particles: sc-41404-V.

Molecular Weight of ADAM7: 108 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) 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.

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.