SANTA CRUZ BIOTECHNOLOGY, INC.

ADAMTS-14 (W-14): sc-67437

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

ADAMTS (a disintegrin and metalloproteinase domain with Thrombospondin type-1 modules) is a family of zinc-dependent proteases that are implicated in a variety of normal and pathological conditions, including arthritis and cancer. ADAMTS protein family members contain an amino-terminal pro-peptide domain, a metalloproteinase domain, a disintegrin-like domain and a carboxy-terminus that contains a varying number of Thrombospondin type-1 (TSP-1) motifs. ADAMTS-14 has a structure that is characteristic of its family and includes four Thrombospondin modules. ADAMTS-14 is most predominantly found in collagen-rich tissue, but can also be found at significant levels in other tissues, such as lung and kidney. ADAMTS-14 may play a major role as a collagen biosynthetic enzyme.

REFERENCES

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6. Kevorkian, L., Young, D.A., Darrah, C., Donell, S.T., Shepstone, L., Porter, S., Brockbank, S.M., Edwards, D.R., Parker, A.E. and Clark, I.M. 2004. Expression profiling of metalloproteinases and their inhibitors in cartilage. Arthritis Rheum. 50: 131-141.

CHROMOSOMAL LOCATION

Genetic locus: ADAMTS14 (human) mapping to 10q22.1; Adamts14 (mouse) mapping to 10 B4.

SOURCE

ADAMTS-14 (W-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ADAMTS-14 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-67437 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ADAMTS-14 (W-14) is recommended for detection of ADAMTS-14 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).

ADAMTS-14 (W-14) is also recommended for detection of ADAMTS-14 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ADAMTS-14 siRNA (h): sc-61950, ADAMTS-14 siRNA (m): sc-61951, ADAMTS-14 shRNA Plasmid (h): sc-61950-SH, ADAMTS-14 shRNA Plasmid (m): sc-61951-SH, ADAMTS-14 shRNA (h) Lentiviral Particles: sc-61950-V and ADAMTS-14 shRNA (m) Lentiviral Particles: sc-61951-V.

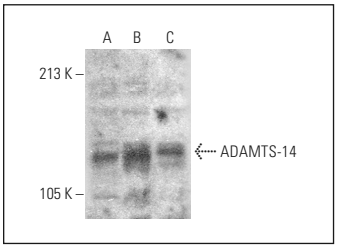
Molecular Weight of ADAMTS-14: 134 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, OVCAR-3 whole cell lysate or K-562 whole cell lysate: sc-2203.

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



ADAMTS-14 (W-14): sc-67437. Western blot analysis of ADAMTS-14 expression in OVCAR-3 (**A**), HeLa (**B**) and K-562 (**C**) 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.