SANTA CRUZ BIOTECHNOLOGY, INC.

ADAMTS-9 (Y-18): sc-21500

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 propeptide 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 genes are primarily expressed in fetal tissues, including the lung, kidney and liver. The human ADAMTS9 gene maps to chromosome 3p14.1 and encodes a deduced 1,1471 amino acid protein that is expressed in ovary, pancreas, heart, lung, placenta, adult kidney and fetal tissues. Human chromosome 3p14.1 is a region that is known to contain deletions and rearrangements in renal cell carcinomas, breast cancers, uterine cervical carcinomas and vulvar carcinomas.

REFERENCES

1. Tang, B.L. and Hong, W. 1999. ADAMTS: a novel family of proteases with an ADAM protease domain and thrombospondin 1 repeats. FEBS Lett. 445: 223-225.
2. Clark, M.E., et al. 2000. ADAMTS9, a novel member of the ADAMTS/metallospondin gene family. Genomics 67: 343-350.
3. Online Mendelian Inheritance in Man, OMIM™. 2000. Johns Hopkins University, Baltimore, MD. MIM Number: 605175. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
4. Tang, B.L. 2001. ADAMTS: a novel family of extracellular matrix proteases. Int. J. Biochem. Cell Biol. 33: 33-44.
5. Cal, S., et al. 2002. Cloning, expression analysis, and structural characterization of seven novel human ADAMTSs, a family of metalloproteinases with disintegrin and thrombospondin-1 domains. Gene 283: 49-62.
6. LocusLink Report (LocusID: 11095). http://www.ncbi.nlm.nih.gov/LocusLink/

CHROMOSOMAL LOCATION

Genetic locus: ADAMTS9 (human) mapping to 3p14.1.

SOURCE

ADAMTS-9 (Y-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ADAMTS-9 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-21500 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.

APPLICATIONS

ADAMTS-9 (Y-18) is recommended for detection of ADAMTS-9 of 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-9 (Y-18) is also recommended for detection of ADAMTS-9 in additional species, including equine, canine, porcine and avian.

Suitable for use as control antibody for ADAMTS-9 siRNA (h): sc-45817, ADAMTS-9 shRNA Plasmid (h): sc-45817-SH and ADAMTS-9 shRNA (h) Lentiviral Particles: sc-45817-V.

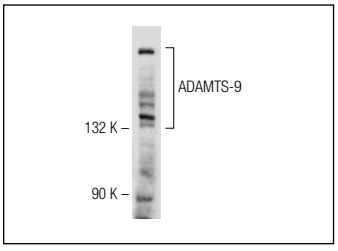
Molecular Weight of ADAMTS-9: 180/250 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

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-9 (Y-18): sc-21500. Western blot analysis of ADAMTS-9 expression in HeLa whole cell lysate.

SELECT PRODUCT CITATIONS

1. Pockert, A.J., et al. 2009. Modified expression of the ADAMTS enzymes and tissue inhibitor of metalloproteinases 3 during human intervertebral disc degeneration. Arthritis Rheum. 60: 482-491.

RESEARCH USE

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