ADAMTS-17 (E-19): sc-74304



The Power to Question

BACKGROUND

ADAMTS (a disintegrin and metalloproteinase domain with Thrombospondin 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 N-terminal propeptide domain, a metalloproteinase domain, a disintegrin-like domain and a C-terminus that contains a varying number of Thrombospondin 1 (TSP-1) motifs. ADAMTS-17 (ADAM metallopeptidase with Thrombospondin 1 motif, 17) is a 1,095 amino acid secreted protein that belongs to the ADAMTS family. Expressed in liver, prostate, brain and in fetal lung, ADAMTS-17 has seven N-glycosylation sites and shares 56% sequence identity with a related family member, ADAMTS-19. ADAMTS-17 has a conserved cysteine residue in its cysteine-switch motif that, when bound to one zinc ion, inhibits the protein's enzymatic activity.

REFERENCES

- Kuno, K., Kanada, N., Nakashima, E., Fujiki, F., Ichimura, F. and Matsushima, K. 1997. Molecular cloning of a gene encoding a new type of metalloproteinase-disintegrin family protein with Thrombospondin motifs as an inflammation associated gene. J. Biol. Chem. 272: 556-562.
- 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.
- Cal, S., Obaya, A.J., Llamazares, M., Garabaya, C., Quesada, V. and López-Otín, C. 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.
- 4. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 607511. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- Overall, C.M., Tam, E.M., Kappelhoff, R., Connor, A., Ewart, T., Morrison, C.J., Puente, X., López-Otín, C. and Seth, A. 2004. Protease degradomics: mass spectrometry discovery of protease substrates and the CLIP-CHIP, a dedicated DNA microarray of all human proteases and inhibitors. Biol. Chem. 385: 493-504.
- Davidson, R.K., Waters, J.G., Kevorkian, L., Darrah, C., Cooper, A., Donell, S.T. and Clark, I.M. 2006. Expression profiling of metalloproteinases and their inhibitors in synovium and cartilage. Arthritis Res. Ther. 8: R124.

CHROMOSOMAL LOCATION

Genetic locus: ADAMTS17 (human) mapping to 15q26.3; Adamts17 (mouse) mapping to 7 $\rm C$.

SOURCE

ADAMTS-17 (E-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ADAMTS-17 of human origin.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-74304 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ADAMTS-17 (E-19) is recommended for detection of ADAMTS-17 of mouse, rat and 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).

ADAMTS-17 (E-19) is also recommended for detection of ADAMTS-17 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for ADAMTS-17 siRNA (h): sc-72445, ADAMTS-17 siRNA (m): sc-72446, ADAMTS-17 shRNA Plasmid (h): sc-72445-SH, ADAMTS-17 shRNA Plasmid (m): sc-72446-SH, ADAMTS-17 shRNA (h) Lentiviral Particles: sc-72445-V and ADAMTS-17 shRNA (m) Lentiviral Particles: sc-72446-V.

Molecular Weight of ADAMTS-17: 121 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201.

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.

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.



Try **ADAMTS-17 (Q-12): sc-100480**, our highly recommended monoclonal alternative to ADAMTS-17 (E-19).

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 **Europe** +00800 4573 8000 49 6221 4503 0 **www.scbt.com**