

ADAMTS-13 (C-17): sc-21511

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 amino-terminal propeptide domain, a metalloproteinase domain, a disintegrin-like domain and a carboxy-terminus that contains a varying number of thrombospondin 1 (TSP-1) motifs. ADAMTS genes are primarily expressed in fetal tissues, including the lung, kidney and liver. The human ADAMTS13 gene maps to chromosome 9q34.2 and encodes a 1,427-amino acid protein, known as von Willebrand factor-cleaving protease, that is expressed in the liver and placenta. ADAMTS-13 cleaves the peptide bond between Tyr 842 and Met 843 in monomeric subunits of von Willebrand factor. Human ADAMTS-13 protein can be expressed as multiple variants that share a common amino-terminal sequence.

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. Tang, B.L. 2001. ADAMTS: a novel family of extracellular matrix proteases. *Int. J. Biochem. Cell Biol.* 33: 33-44.
3. Gerritsen, H.E., Robles, R., Lammle, B. and Furlan, M. 2001. Partial amino acid sequence of purified von Willebrand factor-cleaving protease. *Blood* 98: 1654-1661.
4. Online Mendelian Inheritance in Man, OMIM™. 2001. Johns Hopkins University, Baltimore, MD. MIM Number: 605421. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
5. Cal, S., Obaya, A.J., Llamazares, M., Garabaya, C., Quesada, V. and Lopez-Otin, 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.
6. LocusLink Report (LocusID: 11093). <http://www.ncbi.nlm.nih.gov/LocusLink/>

CHROMOSOMAL LOCATION

Genetic locus: ADAMTS13 (human) mapping to 9q34.2.

SOURCE

ADAMTS-13 (C-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of ADAMTS-13 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-21511 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

ADAMTS-13 (C-17) is recommended for detection of precursor and mature forms of ADAMTS-13 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-13 (C-17) is also recommended for detection of precursor and mature forms of ADAMTS-13 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for ADAMTS-13 siRNA (h): sc-37058, ADAMTS-13 shRNA Plasmid (h): sc-37058-SH and ADAMTS-13 shRNA (h) Lentiviral Particles: sc-37058-V.

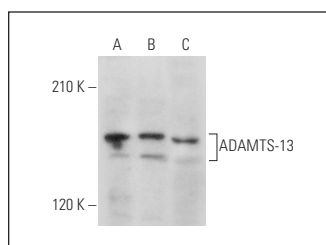
Molecular Weight of ADAMTS-13: 176 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, Jurkat whole cell lysate: sc-2204 or CCRF-CEM cell lysate: sc-2225.

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-13 (C-17): sc-21511. Western blot analysis of ADAMTS-13 expression in Jurkat (A), K-562 (B) and CCRF-CEM (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.

PROTOCOLS

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