

ADAMTS-13 (H-300): sc-25584

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., et al. 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/>

CHROMOSOMAL LOCATION

Genetic locus: ADAMTS13 (human) mapping to 9q34.2; Adamts13 (mouse) mapping to 2 A3.

SOURCE

ADAMTS-13 (H-300) is a rabbit polyclonal antibody raised against amino acids 1128-1427 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.

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.

APPLICATIONS

ADAMTS-13 (H-300) is recommended for detection of ADAMTS-13 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

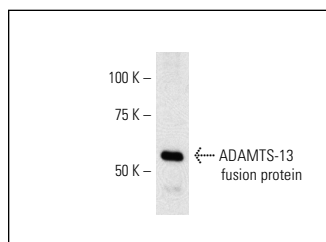
Suitable for use as control antibody for ADAMTS-13 siRNA (h): sc-37058, ADAMTS-13 siRNA (m): sc-37059, ADAMTS-13 shRNA Plasmid (h): sc-37058-SH, ADAMTS-13 shRNA Plasmid (m): sc-37059-SH, ADAMTS-13 shRNA (h) Lentiviral Particles: sc-37058-V and ADAMTS-13 shRNA (m) Lentiviral Particles: sc-37059-V.

Molecular Weight of ADAMTS-13: 176 kDa.

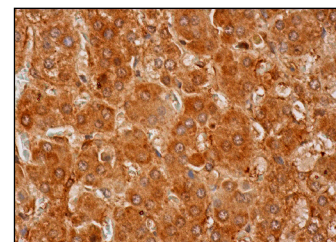
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz[™]: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



ADAMTS-13 (H-300): sc-25584. Western blot analysis of human recombinant ADAMTS-13 fusion protein.



ADAMTS-13 (H-300): sc-25584. Immunoperoxidase staining of formalin fixed, paraffin-embedded human adrenal gland tissue showing cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

1. Bockmeyer, C.L., et al. 2011. ADAMTS13—marker of contractile phenotype of arterial smooth muscle cells lost in benign nephrosclerosis. *Nephrol. Dial. Transplant.* 26: 1871-1881.
2. Zhang, Y., et al. 2011. Antithrombotic effect of grape seed proanthocyanidins extract in a rat model of deep vein thrombosis. *J. Vasc. Surg.* 53: 743-753.