

ADAMTS-1 (A-19): sc-5467

BACKGROUND

ADAMTS-1, also known as METH-1, C3-C5 and KIAA1346, and the related protein ADAMTS-8, also known as METH-2 and FLJ41712, represent a new family of proteins with metalloprotease, disintegrin and thrombospondin domains. ADAMTS-1 and ADAMTS-2 are secreted and proteolytically processed proteins that are 51.7% identical but display different, non-overlapping patterns of expression in tissues and cultured cell lines. Both ADAMTS proteins have been shown to be more active than Thrombospondin 1 or endostatin in preventing angiogenesis in a cornea pocket model, and both may have application for the inhibition of new blood vessel formation in a range of tumor types. The spacer region and the thrombospondin type I motifs in the carboxy-terminus of ADAMTS-1 are important for anchoring ADAMTS-1 to the extracellular matrix.

REFERENCES

1. Kuno, K., et al. 1997. The exon/intron organization and chromosomal mapping of the mouse ADAMTS-1 gene encoding an ADAM family protein with TSP motifs. *Genomics* 46: 466-471.
2. Kuno, K., et al. 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.
3. Kuno, K. and Matsushima, K. 1998. ADAMTS-1 protein anchors at the extracellular matrix through the thrombospondin type I motifs and its spacing region. *J. Biol. Chem.* 273: 13912-13917.
4. Kuno, K., et al. 1999. ADAMTS-1 is an active metalloproteinase associated with the extracellular matrix. *J. Biol. Chem.* 274: 18821-18826.

CHROMOSOMAL LOCATION

Genetic locus: ADAMTS1 (human) mapping to 21q21.3; Adamts1 (mouse) mapping to 16 C3.3.

SOURCE

ADAMTS-1 (A-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of ADAMTS-1 of mouse 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-5467 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.

PROTOCOLS

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

APPLICATIONS

ADAMTS-1 (A-19) is recommended for detection of the ADAMTS-1 precursor of mouse, rat and, to a lesser extent, 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); non cross-reactive with mature ADAMTS-1.

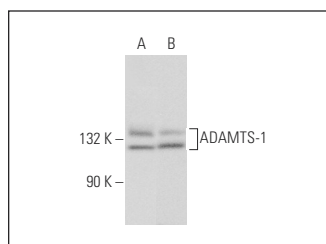
Suitable for use as control antibody for ADAMTS-1 siRNA (h): sc-41425, ADAMTS-1 siRNA (m): sc-41426, ADAMTS-1 shRNA Plasmid (h): sc-41425-SH, ADAMTS-1 shRNA Plasmid (m): sc-41426-SH, ADAMTS-1 shRNA (h) Lentiviral Particles: sc-41425-V and ADAMTS-1 shRNA (m) Lentiviral Particles: sc-41426-V.

Molecular Weight of mature ADAMTS-1: 85 kDa.

Molecular Weight of ADAMTS-1 precursor: 110 kDa.

Positive Controls: KNRK whole cell lysate: sc-2214 or CSMLO whole cell lysate: sc-364369.

DATA



ADAMTS-1 (A-19): sc-5467. Western blot analysis of ADAMTS-1 expression in SW480 (A) and CSMLO (B) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Nakamura, K., et al. 2004. Dynamic induction of ADAMTS1 gene in the early phase of acute myocardial infarction. *J. Biochem.* 136: 439-446.
2. Medina-Flores, R., et al. 2004. Destruction of extracellular matrix proteoglycans is pervasive in simian retroviral neuroinfection. *Neurobiol. Dis.* 16: 604-616.
3. Wachsmuth, L., et al. 2004. ADAMTS-1, a gene product of articular chondrocytes *in vivo* and *in vitro*, is downregulated by interleukin 1β. *J. Rheumatol.* 31: 315-320.

RESEARCH USE

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



Try **ADAMTS-1 (3C8F4): sc-47727** or **ADAMTS-1 (3E4C6B4): sc-47726**, our highly recommended monoclonal alternatives to ADAMTS-1 (A-19).