

ADAMTS-1 (L-18): sc-5468

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.

CHROMOSOMAL LOCATION

Genetic locus: Adamts1 (mouse) mapping to 16 C3.3.

SOURCE

ADAMTS-1 (L-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region 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-5468 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ADAMTS-1 (L-18) is recommended for detection of the ADAMTS-1 precursor of mouse and rat 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 (m): sc-41426, ADAMTS-1 shRNA Plasmid (m): sc-41426-SH and ADAMTS-1 shRNA (m) Lentiviral Particles: sc-41426-V.

Molecular Weight of mature ADAMTS-1: 85 kDa.

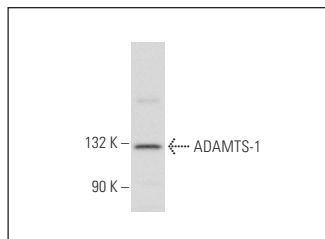
Molecular Weight of ADAMTS-1 precursor: 110 kDa.

Positive Controls: KNRK whole cell lysate: sc-2214 or NIH/3T3 whole cell lysate: sc-2210.

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-1 (L-18): sc-5468. Western blot analysis of ADAMTS-1 expression in NIH/3T3 whole cell lysate.

SELECT PRODUCT CITATIONS

1. 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.
2. Rehn, A.P., et al. 2007. ADAMTS-1 increases the three-dimensional growth of osteoblasts through type I collagen processing. *Bone* 41: 231-238.
3. Didangelos, A., et al. 2012. Novel role of ADAMTS-5 protein in proteoglycan turnover and lipoprotein retention in atherosclerosis. *J. Biol. Chem.* 287: 19341-19345.

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.

MONOS
Satisfaction
Guaranteed

Try **ADAMTS-1 (3C8F4): sc-47727** or **ADAMTS-1 (3E4C6B4): sc-47726**, our highly recommended monoclonal alternatives to ADAMTS-1 (L-18).