

ADAMTS-1 (30D445.1): sc-52911

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.
5. Vazquez, F., et al. 1999. METH-1, a human ortholog of ADAMTS-1, and METH-2 are members of a new family of proteins with angio-inhibitory activity. *J. Biol. Chem.* 274: 23349-23357.

CHROMOSOMAL LOCATION

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

SOURCE

ADAMTS-1 (30D445.1) is a mouse monoclonal antibody raised against synthetic ADAMTS-1 of human origin.

PRODUCT

Each vial contains 100 µl ascites containing IgM with < 0.1% sodium azide.

STORAGE

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

PROTOCOLS

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

APPLICATIONS

ADAMTS-1 (30D445.1) is recommended for detection of ADAMTS-1 of mouse, rat and human origin by Western Blotting (starting dilution to be determined by researcher, dilution range 1:100-1:5000) and immunoprecipitation [1-2 µl per 100-500 µg of total protein (1 ml of cell lysate)].

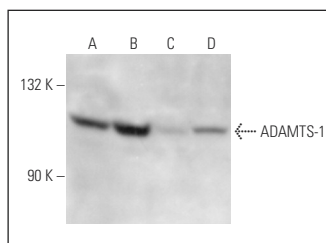
Suitable for use as control antibody for ADAMTS-1 siRNA (h): sc-41425, ADAMTS-1 siRNA (m): sc-41426, ADAMTS-1 shRNA Plasmid (h): sc-41425-SH, ADAMTS-1 shRNA Plasmid (m): sc-41426-SH, ADAMTS-1 shRNA (h) Lentiviral Particles: sc-41425-V and ADAMTS-1 shRNA (m) Lentiviral Particles: sc-41426-V.

Molecular Weight of ADAMTS-1 precursor: 110 kDa.

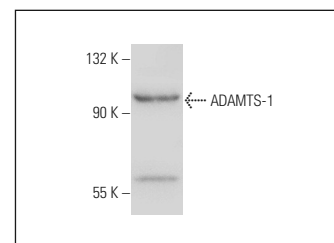
Molecular Weight of mature ADAMTS-1: 85 kDa.

Positive Controls: ES-2 cell lysate: sc-24674, Caki-1 cell lysate: sc-2224 or A-375 cell lysate: sc-3811.

DATA



ADAMTS-1 (30D445.1): sc-52911. Western blot analysis of ADAMTS-1 expression in ES-2 (A), OV-90 (B), Caki-1 (C) and A-375 (D) whole cell lysates.



ADAMTS-1 (30D445.1): sc-52911. Western blot analysis of ADAMTS-1 expression in KNRK whole cell lysate.

SELECT PRODUCT CITATIONS

1. Turkoglu, S.A. and Kockar, F. 2016. SP1 and USF differentially regulate ADAMTS1 gene expression under normoxic and hypoxic conditions in hepatoma cells. *Gene* 575: 48-57.

RESEARCH USE

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