SANTA CRUZ BIOTECHNOLOGY, INC.

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

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 celllines. 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.

RESEARCH USE

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

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)].

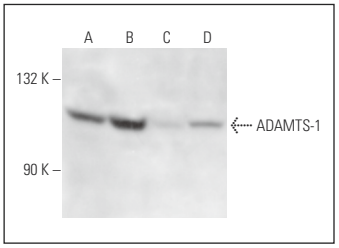
Suitable for use as control antibody for ADAMTS-1 siRNA (h): sc-41425, ADAMTS-1 siRNA (m): sc-41426, ADAMTS-1 shRNA Plasmid (h): sc-41425-SH, ADAMTS-1 shRNA Plasmid (m): sc-41426-SH, ADAMTS-1 shRNA (h) Lentiviral Particles: sc-41425-V and ADAMTS-1 shRNA (m) Lentiviral Particles: sc-41426-V.

Molecular Weight of ADAMTS-1 precursor: 110 kDa.

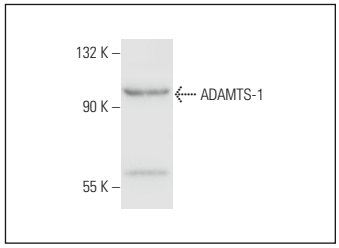
Molecular Weight of mature ADAMTS-1: 85 kDa.

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 ADAMTS-1 gene expression under normoxic and hypoxic conditions in hepatoma cells. Gene 575: 48-57.

PROTOCOLS

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