ADAMTS-14 (H-138): sc-50488



The Power to Question

BACKGROUND

ADAMTS (a disintegrin and metalloproteinase domain with thrombospondin type-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 type-1 (TSP-1) motifs. ADAMTS-14 has a structure that is characteristic of its family and includes four thrombospondin modules. ADAMTS-14 is most predominantly found in collagen-rich tissue, but can also be found at significant levels in other tissues, such as lung and kidney. ADAMTS-14 may play a major role as a collagen biosynthetic enzyme.

REFERENCES

- Ramamurthy, R.S., Reveri, M., Pyati, S.P. and Reale, M. 1976. Transport of high risk neonates. Part I: clinical and metabolic observations. IMJ. III. Med. J. 150: 518-521.
- Hurskainen, T. L., Hirohata, S., Seldin, M. F. and Apte, S.S. 1999.
 ADAMTS5, ADAMTS6 and ADAMTS7, novel members of a new family of zinc metalloproteases: general features and genomic distribution of the ADAMTS family. J. Biol. Chem. 274: 25555-25563.
- 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.
- Tang, B.L. 2001. ADAMTS: a novel family of extracellular matrix proteases. Int. J. Biochem. Cell Biol. 33: 33-44.
- Cal, S., Obaya, A.J., Llamazares, M., Garabaya, C., Quesada, V. and Lopez-Otin, C. 2002. Cloning, expression analysis and structural characterization of seven novel human ADAMTSs, a family of metalloproteinases with disintegrin and Thrombospondin 1 domains. Gene 283: 49-62.
- Colige, A., Vandenberghe, I., Thiry, M., Lambert, C.A., Van Beeumen, J., Li, S.W., Prockop, D.J., Lapiere, C.M. and Nusgens, B.V. 2002. Cloning and characterization of ADAMTS-14, a novel ADAMTS displaying high homology with ADAMTS-2 and ADAMTS-3. J. Biol. Chem. 277: 5756-5766.
- Kevorkian, L., Young, D.A., Darrah, C., Donell, S.T., Shepstone, L., Porter, S., Brockbank, S.M., Edwards, D.R., Parker, A.E. and Clark, I.M. 2004. Expression profiling of metalloproteinases and their inhibitors in cartilage. Arthritis Rheum. 50: 131-141.
- Goertsches, R., Comabella, M., Navarro, A., Perkal, H. and Montalban, X. 2005. Genetic association between polymorphisms in the ADAMTS-14 gene and multiple sclerosis. J. Neuroimmunol. 164: 140-147.
- 9. Johnston, P., Chojnowski, A.J., Davidson, R.K., Riley, G.P., Donell, S.T. and Clark, I.M. 2007. A complete expression profile of matrix-degrading metal-loproteinases in Dupuytren's disease. J. Hand Surg. 32: 343-351.

CHROMOSOMAL LOCATION

Genetic locus: ADAMTS14 (human) mapping to 10q22.1.

SOURCE

ADAMTS-14 (H-138) is a rabbit polyclonal antibody raised against amino acids 1086-1223 mapping at the C-terminus of ADAMTS-14 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.

APPLICATIONS

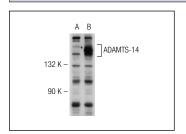
ADAMTS-14 (H-138) is recommended for detection of ADAMTS-14 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for ADAMTS-14 siRNA (h): sc-61950, ADAMTS-14 shRNA Plasmid (h): sc-61950-SH and ADAMTS-14 shRNA (h) Lentiviral Particles: sc-61950-V.

Molecular Weight of ADAMTS-14: 134 kDa.

Positive Controls: ADAMTS-14 (h): 293T Lysate: sc-127939.

DATA



ADAMTS-14 (H-138): sc-50488. Western blot analysis of ADAMTS-14 expression in non-transfected: sc-117752 (A) and human ADAMTS-14 transfected: sc-127939 (B) 293T whole cell lysates.

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.



Try **ADAMTS-14 (G-8):** sc-373773, our highly recommended monoclonal alternative to ADAMTS-14 (H-138).

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com