

ADAMTS-14 (G-8): sc-373773

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

1. Tang, B.L., et al. 1999. ADAMTS: a novel family of proteases with an ADAM protease domain and Thrombospondin 1 repeats. *FEBS Lett.* 445: 223-225.
2. Online Mendelian Inheritance in Man, OMIM™. 2000. Johns Hopkins University, Baltimore, MD. MIM Number: 605008. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
3. Tang, B.L. 2001. ADAMTS: a novel family of extracellular matrix proteases. *Int. J. Biochem. Cell Biol.* 33: 33-44.
4. Cal, S., et al. 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.
5. Colige, A., et al. 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.
6. Kevorkian, L., et al. 2004. Expression profiling of metalloproteinases and their inhibitors in cartilage. *Arthritis Rheum.* 50: 131-141.

CHROMOSOMAL LOCATION

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

SOURCE

ADAMTS-14 (G-8) is a mouse monoclonal antibody raised against amino acids 1086-1223 mapping at the C-terminus of ADAMTS-14 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

ADAMTS-14 (G-8) is available conjugated to agarose (sc-373773 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-373773 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-373773 PE), fluorescein (sc-373773 FITC), Alexa Fluor[®] 488 (sc-373773 AF488), Alexa Fluor[®] 546 (sc-373773 AF546), Alexa Fluor[®] 594 (sc-373773 AF594) or Alexa Fluor[®] 647 (sc-373773 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-373773 AF680) or Alexa Fluor[®] 790 (sc-373773 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

ADAMTS-14 (G-8) is recommended for detection of ADAMTS-14 of human origin by Western Blotting (starting dilution 1:100, 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).

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.

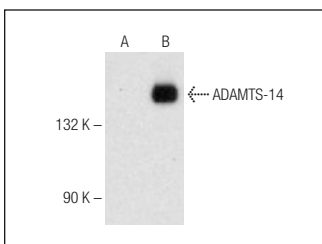
Molecular Weight of ADAMTS-14: 134 kDa.

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

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



ADAMTS-14 (G-8): sc-373773. 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.

PROTOCOLS

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

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