

ADAMTS-8 (C-16): sc-21499

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-8, also designated METH-2, METH-8 or FLJ41712, along with ADAMTS-1 (METH-1, C3-C5), represent a new family of proteins with metalloproteinase, disintegrin and Thrombospondin domains. The spacer region and the Thrombospondin type I motifs in the carboxy-terminus of ADAMTS-8 are important for anchoring the protein to the extracellular matrix. ADAMTS-1 and ADAMTS-8 are both secreted and proteolytically processed proteins. ADAMTS-8 is highly expressed in adult and fetal lung tissue while detected at lower levels in heart, placenta, stomach, brain and kidney tissue.

REFERENCES

1. Kuno, K., Kanada, N., Nakashima, E., Fujiki, F., Ichimura, F. and Matsushima, K. 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.
2. Kuno, K., Iizasa, H., Ohno, S. and Matsushima, K. 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.
3. Vazquez, F., Hastings, G., Ortega, M.A., Lane, T.F., Oikemus, S., Lombardo, M. and Lruela-Arispe, M.L. 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.
4. 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.

CHROMOSOMAL LOCATION

Genetic locus: ADAMTS8 (human) mapping to 11q24.3; Adamts8 (mouse) mapping to 9 A4.

SOURCE

ADAMTS-8 (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of ADAMTS-8 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.

Blocking peptide available for competition studies, sc-21499 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

ADAMTS-8 (C-16) is recommended for detection of ADAMTS-8 of mouse, rat and human 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).

ADAMTS-8 (C-16) is also recommended for detection of ADAMTS-8 in additional species, including equine.

Suitable for use as control antibody for ADAMTS-8 siRNA (h): sc-43603, ADAMTS-8 siRNA (m): sc-45834, ADAMTS-8 shRNA Plasmid (h): sc-43603-SH, ADAMTS-8 shRNA Plasmid (m): sc-45834-SH, ADAMTS-8 shRNA (h) Lentiviral Particles: sc-43603-V and ADAMTS-8 shRNA (m) Lentiviral Particles: sc-45834-V.

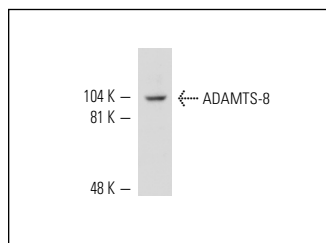
Molecular Weight of ADAMTS-8: 98 kDa.

Positive Controls: rat brain extract: sc-2392.

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-8 (C-16): sc-21499. Western blot analysis of ADAMTS-8 expression in rat brain tissue extract.

RESEARCH USE

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

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Try **ADAMTS-8 (G-4): sc-514717**, our highly recommended monoclonal alternative to ADAMTS-8 (C-16).