

# ADAMTS-8 (G-4): sc-514717

## 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 pro-peptide 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 metalloprotease, 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., 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.
2. 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.

## CHROMOSOMAL LOCATION

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

## SOURCE

ADAMTS-8 (G-4) is a mouse monoclonal antibody raised against amino acids 781-846 mapping near the C-terminus of ADAMTS-8 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

ADAMTS-8 (G-4) is available conjugated to agarose (sc-514717 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514717 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514717 PE), fluorescein (sc-514717 FITC), Alexa Fluor® 488 (sc-514717 AF488), Alexa Fluor® 546 (sc-514717 AF546), Alexa Fluor® 594 (sc-514717 AF594) or Alexa Fluor® 647 (sc-514717 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514717 AF680) or Alexa Fluor® 790 (sc-514717 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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## STORAGE

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

## APPLICATIONS

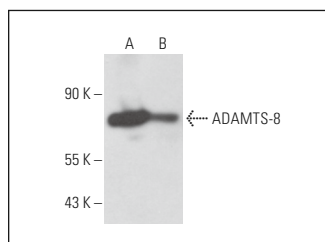
ADAMTS-8 (G-4) is recommended for detection of ADAMTS-8 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 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-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.

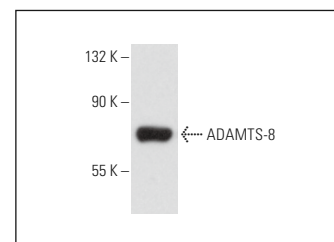
Molecular Weight of ADAMTS-8: 98 kDa.

Positive Controls: NTERA-2 cl.D1 whole cell lysate: sc-364181, F9 cell lysate: sc-2245 or U-2 OS cell lysate: sc-2295.

## DATA



ADAMTS-8 (G-4): sc-514717. Western blot analysis of ADAMTS-8 expression in NTERA-2 cl.D1 (A) and U-2 OS (B) whole cell lysates.



ADAMTS-8 (G-4): sc-514717. Western blot analysis of ADAMTS-8 expression in F9 whole cell lysate.

## SELECT PRODUCT CITATIONS

1. He, D., et al. 2021. Low-intensity pulsed ultrasound promotes aggrecan expression via ZNT-9 in temporomandibular joint chondrocytes. *Gene* 768: 145318.
2. Zha, Y., et al. 2022. ADAMTS-8 promotes cardiac fibrosis partly through activating EGFR dependent pathway. *Front. Cardiovasc. Med.* 9: 797137.
3. Li, J., et al. 2023. Yixin granules reduce myocardial inflammation and fibrosis in rats with heart failure by inhibiting the expression of ADAMTS8. *Int. Heart J.* 64: 741-749.
4. Huang, T.L., et al. 2024. Anethole mitigates H<sub>2</sub>O<sub>2</sub>-induced inflammation in HIG-82 synoviocytes by suppressing the aquaporin 1 expression and activating the protein kinase A pathway. *Environ. Toxicol.* 39: 965-978.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.