

# ADAMTS-2 (F-4): sc-393562



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 N-terminal propeptide domain, a metalloproteinase domain, a disintegrin-like domain and a C-terminus that contains a varying number of Thrombospondin type-1 (TSP-1) motifs. ADAMTS genes are primarily expressed in fetal tissues, including the lung, kidney and liver. ADAMTS-2 cleaves the propeptides of Collagen Type I and II, but not Collagen Type III, prior to fibril assembly. It may also play a role in development aside from collagen biosynthesis. ADAMTS-2 is secreted and associated with the extracellular matrix, with the highest levels in skin, bone, tendon and aorta. Defects in ADAMTS-2 are the cause of Ehlers-Danlos syndrome type VIIC (EDS VIIC), a recessively inherited connective-tissue disorder characterized clinically by severe skin fragility and joint hypermobility.

## REFERENCES

1. 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.
2. Tang, B.L. 2001. ADAMTS: a novel family of extracellular matrix proteases. *Int. J. Biochem. Cell Biol.* 33: 33-44.
3. Li, S.W., et al. 2001. Transgenic mice with inactive alleles for procollagen N-proteinase (ADAMTS-2) develop fragile skin and male sterility. *Biochem. J.* 355: 271-278.
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.

## CHROMOSOMAL LOCATION

Genetic locus: ADAMTS2 (human) mapping to 5q35.3; Adamts2 (mouse) mapping to 11 B1.3.

## SOURCE

ADAMTS-2 (F-4) is a mouse monoclonal antibody raised against amino acids 1091-1211 mapping at the C-terminus of ADAMTS-2 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-2 (F-4) is available conjugated to agarose (sc-393562 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393562 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393562 PE), fluorescein (sc-393562 FITC), Alexa Fluor® 488 (sc-393562 AF488), Alexa Fluor® 546 (sc-393562 AF546), Alexa Fluor® 594 (sc-393562 AF594) or Alexa Fluor® 647 (sc-393562 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-393562 AF680) or Alexa Fluor® 790 (sc-393562 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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## APPLICATIONS

ADAMTS-2 (F-4) is recommended for detection of ADAMTS-2 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-2 siRNA (h): sc-91785, ADAMTS-2 siRNA (m): sc-140864, ADAMTS-2 shRNA Plasmid (h): sc-91785-SH, ADAMTS-2 shRNA Plasmid (m): sc-140864-SH, ADAMTS-2 shRNA (h) Lentiviral Particles: sc-91785-V and ADAMTS-2 shRNA (m) Lentiviral Particles: sc-140864-V.

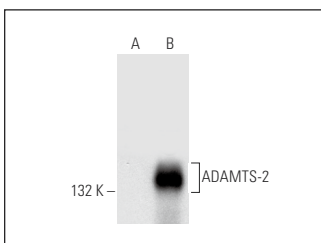
Molecular Weight of ADAMTS-2: 135 kDa.

Positive Controls: ADAMTS-2 (m): 293T Lysate: sc-124925.

## 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-2 (F-4): sc-393562. Western blot analysis of ADAMTS-2 expression in non-transfected: sc-117752 (A) and mouse ADAMTS-2 transfected: sc-124925 (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.

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