

# ADAMTS-L2 (T-16): sc-83782

## 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-L2 (ADAMTS-like protein 2) is a 951 amino acid secreted protein that is highly expressed in lung, kidney and liver. Mutations in the gene encoding ADAMTS are the cause of geleophysic dysplasia, an autosomal recessive disorder characterized by cardiac valvular anomalies, short stature, thick skin and brachydactyly. In individuals affected with geleophysic dysplasia, there is a significant increase in total active TGF $\beta$ 1 and nuclear locations of p-SAMD2 in fibroblasts. Interestingly, ADAMTS-L2 interacts with LTBP-1, a glycoprotein that is part of the platelet-derived TGF $\beta$ 1 complex.

## REFERENCES

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3. Humphray, S.J., et al. 2004. DNA sequence and analysis of human chromosome 9. Nature 429: 369-374.
4. Koo, B.H., et al. 2007. ADAMTS-like 2 (ADAMTSL2) is a secreted glycoprotein that is widely expressed during mouse embryogenesis and is regulated during skeletal myogenesis. Matrix Biol. 26: 431-441.
5. Le Goff, C., et al. 2008. ADAMTSL2 mutations in geleophysic dysplasia demonstrate a role for ADAMTS-like proteins in TGF $\beta$  bioavailability regulation. Nat. Genet. 40: 1119-1123.
6. Online Mendelian Inheritance in Man, OMIM™. 2008. Johns Hopkins University, Baltimore, MD. MIM Number: 612277. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
7. Le Goff, C. and Cormier-Daire, V. 2009. Genetic and molecular aspects of acromelic dysplasia. Pediatr. Endocrinol. Rev. 6: 418-423.

## CHROMOSOMAL LOCATION

Genetic locus: ADAMTSL2 (human) mapping to 9q34.2; AdamtSL2 (mouse) mapping to 2 A3.

## SOURCE

ADAMTS-L2 (T-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ADAMTS-L2 of human origin.

## STORAGE

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

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-83782 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

ADAMTS-L2 (T-16) is recommended for detection of ADAMTS-L2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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-L2 (T-16) is also recommended for detection of ADAMTS-L2 in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for ADAMTS-L2 siRNA (h): sc-72447, ADAMTS-L2 siRNA (m): sc-72448, ADAMTS-L2 shRNA Plasmid (h): sc-72447-SH, ADAMTS-L2 shRNA Plasmid (m): sc-72448-SH, ADAMTS-L2 shRNA (h) Lentiviral Particles: sc-72447-V and ADAMTS-L2 shRNA (m) Lentiviral Particles: sc-72448-V.

Molecular Weight of ADAMTS-L2: 105 kDa.

## 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) 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.

## 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) or our catalog for detailed protocols and support products.