

# ADAMTS-L5 (C-19): sc-241781

## 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-L5 (ADAMTS-like protein 5), also known as thrombospondin type-1 domain-containing protein 6 or THSD6, is a 471 amino acid secreted protein. Encoded by a gene that maps to human chromosome 19p13.3, ADAMTS-L5 contains a single TSP-1 domain and participates in protein and zinc ion binding. Although strongly similar to members of the ADAMTS family, ADAMTS-L5 lacks the metalloprotease and disintegrin-like domains typical of the family.

## REFERENCES

1. Saban, M.R., Hellmich, H.L., Turner, M., Nguyen, N.B., Vadigepalli, R., Dyer, D.W., Hurst, R.E., Centola, M. and Saban, R. 2006. The inflammatory and normal transcriptome of mouse bladder detrusor and mucosa. *BMC Physiol.* 6: 1.
2. Brocker, C.N., Vasiliou, V. and Nebert, D.W. 2009. Evolutionary divergence and functions of the ADAM and ADAMTS gene families. *Hum. Genomics* 4: 43-55.
3. Wang, L.W., Leonhard-Melief, C., Haltiwanger, R.S. and Apte, S.S. 2009. Post-translational modification of thrombospondin type-1 repeats in ADAMTS-like 1/punctin-1 by C-mannosylation of tryptophan. *J. Biol. Chem.* 284: 30004-30015.
4. Apte, S.S. 2009. A disintegrin-like and metalloprotease (reprolysin-type) with thrombospondin type 1 motif (ADAMTS) superfamily: functions and mechanisms. *J. Biol. Chem.* 284: 31493-31497.
5. Okaty, B.W., Miller, M.N., Sugino, K., Hempel, C.M. and Nelson, S.B. 2009. Transcriptional and electrophysiological maturation of neocortical fast-spiking GABAergic interneurons. *J. Neurosci.* 29: 7040-7052.
6. Paruthiyil, S., Cvoro, A., Zhao, X., Wu, Z., Sui, Y., Staub, R.E., Baggett, S., Herber, C.B., Griffin, C., Tagliaferri, M., Harris, H.A., Cohen, I., Bjeldanes, L.F., Speed, T.P., Schaufele, F. and Leitman, D.C. 2009. Drug and cell type-specific regulation of genes with different classes of estrogen receptor  $\beta$ -selective agonists. *PLoS ONE* 4: e6271.
7. Sollazzo, V., Palmieri, A., Pezzetti, F., Massari, L. and Carinci, F. 2010. Effects of pulsed electromagnetic fields on human osteoblastlike cells (MG-63): a pilot study. *Clin. Orthop. Relat. Res.* 468: 2260-2277.
8. SWISS-PROT/TrEMBL (Q6ZMM2). World Wide Web URL: <http://www.uniprot.org/uniprot/Q6ZMM2>

## CHROMOSOMAL LOCATION

Genetic locus: ADAMTSL5 (human) mapping to 19p13.3; Adamt5l5 (mouse) mapping to 10 C1.

## RESEARCH USE

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

## SOURCE

ADAMTS-L5 (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of ADAMTS-L5 of human origin.

## 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-241781 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

ADAMTS-L5 (C-19) is recommended for detection of ADAMTS-L5 of mouse 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-L5 (C-19) is also recommended for detection of ADAMTS-L5 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for ADAMTS-L5 siRNA (h): sc-97258, ADAMTS-L5 siRNA (m): sc-140871, ADAMTS-L5 shRNA Plasmid (h): sc-97258-SH, ADAMTS-L5 shRNA Plasmid (m): sc-140871-SH, ADAMTS-L5 shRNA (h) Lentiviral Particles: sc-97258-V and ADAMTS-L5 shRNA (m) Lentiviral Particles: sc-140871-V.

Molecular Weight of ADAMTS-L5: 52 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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> Mounting Medium: sc-24941.

## STORAGE

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

## PROTOCOLS

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