SANTA CRUZ BIOTECHNOLOGY, INC.

ADAMTS-L4 (H-250): sc-134654

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-L4 (ADAMTS-like protein 4), also known as TSRC1 (thrombospondin repeat-containing protein 1), is a 1,074 amino acid secreted protein. Known to interact with cathepsin B, ADAMTS-L4 functions as a positive regulator of apoptosis. Mutations in the gene that encodes ADAMTS-L4 are a cause of autosomal recessive isolated ectopia lentis (EL), a rare condition in which defective zonule formation results in partial or complete displacement of the lens from its space. ADAMTS-L4 is expressed in spleen, liver, skeletal muscle, lung, colon, testis, placenta heart and leukocyte.

REFERENCES

1. Adams, J.C. and Tucker, R.P. 2000. The thrombospondin type 1 repeat (TSR) superfamily: diverse proteins with related roles in neuronal development. Dev. Dyn. 218: 280-299.
2. Buchner, D.A. and Meisler, M.H. 2003. TSRC1, a widely expressed gene containing seven thrombospondin type I repeats. Gene 307: 23-30.
3. Liu, T., et al. 2005. Human plasma N-glycoproteome analysis by immunoaffinity subtraction, hydrazide chemistry, and mass spectrometry. J. Proteome Res. 4: 2070-2080.
4. Liu, J., et al. 2006. Cathepsin B and its interacting proteins, Bikunin and TSRC1, correlate with TNF-induced apoptosis of ovarian cancer cells OV-90. FEBS Lett. 580: 245-250.

CHROMOSOMAL LOCATION

Genetic locus: ADAMTSL4 (human) mapping to 1q21.3; Adamtsl4 (mouse) mapping to 3 F2.1.

SOURCE

ADAMTS-L4 (H-250) is a rabbit polyclonal antibody raised against amino acids 586-835 mapping within an internal region of ADAMTS-L4 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.

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 or our catalog for detailed protocols and support products.

APPLICATIONS

ADAMTS-L4 (H-250) is recommended for detection of ADAMTS-L4 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-L4 (H-250) is also recommended for detection of ADAMTS-L4 in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for ADAMTS-L4 siRNA (h): sc-88067, ADAMTS-L4 siRNA (m): sc-140870, ADAMTS-L4 shRNA Plasmid (h): sc-88067-SH, ADAMTS-L4 shRNA Plasmid (m): sc-140870-SH, ADAMTS-L4 shRNA (h) Lentiviral Particles: sc-88067-V and ADAMTS-L4 shRNA (m) Lentiviral Particles: sc-140870-V.

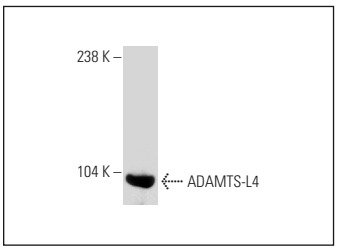
Molecular Weight of ADAMTS-L4 isoforms: 116/95 kDa.

Positive Controls: mouse brain extract: sc-2253.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



ADAMTS-L4 (H-250): sc-134654. Western blot analysis of ADAMTS-L4 expression in mouse brain tissue extract.

RESEARCH USE

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