

# Punctin (L-13): sc-82725

## BACKGROUND

Punctin, also known as Punctin-1 or ADAMTS-like protein-1 (ADAMTSL-1), is a secreted, glycosylated protein belonging to the ADAMTS family of metalloproteases. Unlike the typical ADAMTS protein, Punctin lacks the disintegrin-like and metalloproteinase domains. Punctin consists of a signal peptide, four Thrombospondin type-1 repeats (TSRs), a cysteine-rich domain and a spacer region. O-fucosylation of the TSR repeats regulates the secretion of Punctin. Punctin is closely related to the larger ADAMTS-like protein Punctin-2, and both are similar to the invertebrate protein Papilin. Punctin is expressed in skeletal muscle, localizing to the extracellular matrix, and it plays a significant role in extracellular matrix turnover. Two isoforms exist for Punctin due to alternative splicing. Isoform 1 is the full length mature protein. Isoform 2 lacks amino acids 362-378 and 457-525 and contains a distinct sequence for amino acids 448-456.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: ADAMTSL1 (human) mapping to 9p22.2; Adamts1 (mouse) mapping to 4 C4.

## SOURCE

Punctin (L-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Punctin 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.

Blocking peptide available for competition studies, sc-82725 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Punctin (L-13) is recommended for detection of Punctin 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); non cross-reactive with family member Punctin-2.

Punctin (L-13) is also recommended for detection of Punctin in additional species, including equine, canine and bovine.

Suitable for use as control antibody for Punctin siRNA (h): sc-76297, Punctin siRNA (m): sc-76298, Punctin shRNA Plasmid (h): sc-76297-SH, Punctin shRNA Plasmid (m): sc-76298-SH, Punctin shRNA (h) Lentiviral Particles: sc-76297-V and Punctin shRNA (m) Lentiviral Particles: sc-76298-V.

Molecular Weight of Punctin: 63 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.

## 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.

## PROTOCOLS

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