

Punctin (W-15): sc-82727

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 (W-15) 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-82727 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Punctin (W-15) 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 (W-15) 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 or our catalog for detailed protocols and support products.



Try **Punctin (PU29Z): sc-74258**, our highly recommended monoclonal alternative to Punctin (W-15).