

aggrecan (N38): sc-81542

BACKGROUND

The large chondroitin sulfate proteoglycan, aggrecan, is the predominant proteoglycan present in cartilage. Aggrecan is a member of the chondroitin sulphate proteoglycan family, which also includes versican/PG-M, neurocan and brevican. Aggrecan is a complex multi-domain macromolecule that undergoes extensive processing and posttranslational modification. Aggrecan in cartilage forms aggregates with hyaluronan and link protein, embedded in a collagen network. Aggrecan accounts for the compressive stiffness and resilience of the hyaline cartilage. Many forms of inflammatory arthritis are shown to be accompanied with aggrecan degradation and loss from the cartilage.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ACAN (human) mapping to 15q26.1.

SOURCE

aggrecan (N38) is a mouse monoclonal antibody raised against the N-terminal sequence ARGSVIL of aggrecan of human origin.

PRODUCT

Each vial contains 100 µg IgG₁ in 1.0 ml 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 for detailed protocols and support products.

APPLICATIONS

aggrecan (N38) is recommended for detection of the N-terminal sequence ARGSVIL of aggrecan fragments produced by proteolysis at the aggrecanase site within the interglobular domain of aggrecan (aggrecan-IGD) of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000); non cross-reactive with the sequence ARGSVIL contained within uncleaved polypeptide chains. ARGSVIL fragments derived from native aggrecan require prior deglycosylation for antibody binding.

Suitable for use as control antibody for aggrecan siRNA (h): sc-41897, aggrecan shRNA Plasmid (h): sc-41897-SH and aggrecan shRNA (h) Lentiviral Particles: sc-41897-V.

Molecular Weight of aggrecan: 200 kDa.

RESEARCH USE

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



See **aggrecan (4F4): sc-33695** for aggrecan antibody conjugates, including AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647.