

Product datasheet for TA336492

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Aggrecan (ACAN) Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: FC, ICC/IF, IHC, WB

Recommended Dilution: Immunohistochemistry-Frozen, Flow Cytometry, Immunohistochemistry-Paraffin: 1:1000,

Immunohistochemistry: 1:1000, Immunocytochemistry/ Immunofluorescence: 1:20-1:100,

Western Blot: 1:1000

Reactivity: Human, Mouse, Rat, Bovine, Canine, Porcine

Host: Rabbit

Clonality: Polyclonal

Immunogen: A synthetic peptide corresponding to a region of human Aggrecan (within residues 350-400).

[UniProt# P16112]

Formulation: PBS, 30% glycerol, 0.1% Sodium Azide. Store at -20C. Avoid freeze-thaw cycles.

Concentration: lot specific

Purification: Immunogen affinity purified

Conjugation: Unconjugated

Storage: Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

Predicted Protein Size: 61 kDa

Gene Name: aggrecan

Database Link: NP 001126

Entrez Gene 11595 MouseEntrez Gene 58968 RatEntrez Gene 176 Human

P16112





Background:

Aggrecan Neoepitope (ACAN) is a proteoglycan belonging to aggrecan/versican proteoglycan family and is a major component of extracellular matrix of cartilagenous tissues. ACAN proteoglycan is mainly consists of chondroitin sulfate, however, it also contains keratan sulfate chains, N/O-linked oligosaccharides. Aggrecanase mediated cleavage results in ACAN fragments release from articular cartilage into synovial fluid during different stages of human osteoarthritis. ACAN is a secreted protein found in extracellular space/extracellular matrix and is more or less restricted to cartilages where it interact with FBLN1 as well as COM for serving the role of resisting compression in cartilage. ACAN binds to hyaluronic acid via an N-terminal globular region with high avidity and its expression occurs in chondrocytes throughout the developing skeleton. ACAN defects have been linked to spondyloepiphyseal dysplasia type Kimberley (SEDK), spondyloepimetaphyseal dysplasia aggrecan type (SEMD-ACAN), osteochondritis dissecans short stature and early-onset osteoarthritis (OD).

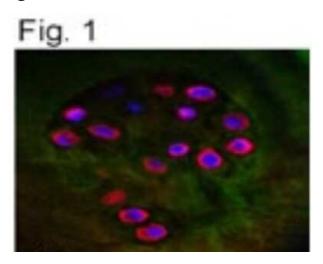
Synonyms:

AGC1; AGCAN; CSPG1; CSPGCP; MSK16; SEDK

Note:

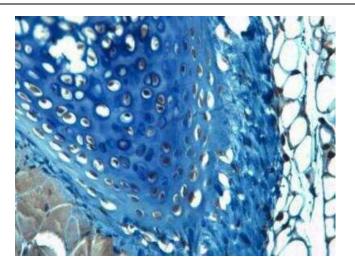
This Aggrecan Neoepitope antibody is useful for Immunocytochemistry/Immunofluorescence, Immunohistochemistry-paraffin embedded sections, and Western Blot. In WB a band is detected at ~61 kDa representing the neoepitope sequence (NITEGE) generated by aggrecanase-mediated cleavage at Glu373-Ala374 of aggrecan core proteins. Use in Immunohistochemistry-Frozen and Flow Cytometry reported in scientific literature (PMID 21482542)

Product images:

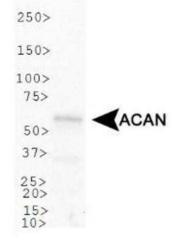


Immunocytochemistry/Immunofluorescence: Aggrecan Neoepitope Antibody TA336492 - Detection of ACAN in OA cartilage using TA336492.

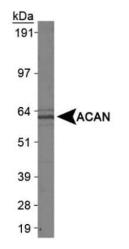




Immunohistochemistry: Aggrecan Neoepitope Antibody TA336492 - Analysis of ACAN in mouse cartilage with hematoxylin counterstain.



Western Blot: Aggrecan Neoepitope Antibody TA336492 - Analysis of ACAN in U2OS cell lysate.



Western Blot: Aggrecan Neoepitope Antibody TA336492 - Analysis of ACAN in L929 whole cell extract using TA336492.