Product Name: **Cleaved-Aggrecan (D369) Rabbit Polyclonal Antibody**
Catalog #: **APRab08947**
For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA
Reactivity	Human,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:10000-1:20000
Molecular Weight	44kDa

Antigen Information

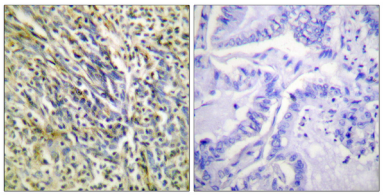
Gene Name	ACAN
Alternative Names	ACAN; AGC1; CSPG1; MSK16; Aggrecan core protein; Cartilage-specific proteoglycan core protein; CSPCP; Chondroitin sulfate proteoglycan core protein 1; Chondroitin sulfate proteoglycan 1
Gene ID	176.0
SwissProt ID	P16112
Immunogen	The antiserum was produced against synthesized peptide derived from human Aggrecan. AA range:320-369

Background

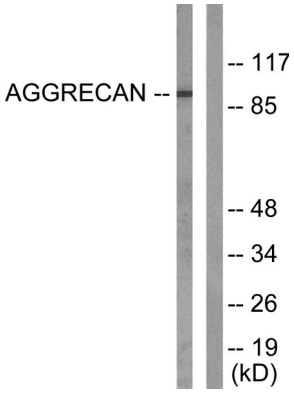
This gene is a member of the aggrecan/versican proteoglycan family. The encoded protein is an integral part of the extracellular matrix in cartilagenous tissue and it withstands compression in cartilage. Mutations in this gene may be involved in skeletal dysplasia and spinal degeneration. Multiple alternatively spliced transcript variants that encode different protein isoforms have been observed in this gene. [provided by RefSeq, Jul 2008],alternative products:Additional isoforms seem to exist,developmental stage:Expression was detected in chondrocytes throughout the developing skeleton.,disease:Defects in ACAN are the cause of spondyloepiphyseal dysplasia type Kimberley (SEDK) [MIM:608361]. Spondyloepiphyseal dysplasias are a heterogeneous group of congenital chondrodysplasias that specifically affect epiphyses and vertebrae. The autosomal dominant SEDK is associated with premature degenerative arthropathy.,domain:Two globular domains, G1 and G2, comprise the N-terminus of the proteoglycan, while another globular region, G3, makes up the C-terminus. G1 contains Link domains and thus consists of three disulfide-bonded loop structures designated as the A, B, B' motifs. G2 is similar to G1. The keratan sulfate (KS) and the chondroitin sulfate (CS) attachment domains lie between G2 and G3.,function:This proteoglycan is a major component of extracellular matrix of cartilagenous tissues. A major function of this protein is to resist compression in cartilage. It binds avidly to hyaluronic acid via an N-terminal globular region.,online information:Aggrecan,PTM:Contains mostly chondroitin sulfate, but also keratan sulfate chains, N-linked and O-linked oligosaccharides. The release of aggrecan fragments from articular cartilage into the synovial fluid at all stages of human osteoarthritis is the result of cleavage by aggrecanase.,similarity:Belongs to the aggrecan/versican proteoglycan family.,similarity:Contains 1 C-type lectin domain.,similarity:Contains 1 EGF-like domain.,similarity:Contains 1 Ig-like V-type (immunoglobulin-like) domain.,similarity:Contains 1 Sushi (CCP/SCR) domain.,similarity:Contains 4 Link domains.,subunit:Interacts with FBLN1.,tissue specificity:Restricted to cartilages.,

Research Area

Image Data



Immunohistochemistry analysis of paraffin-embedded human lung carcinoma tissue, using Aggrecan （Cleaved-Asp369） Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from Jurkat cells, treated with Etoposide 25uM 60 ', using Aggrecan (Cleaved-Asp369) Antibody. The lane on the right is blocked with the synthesized peptide.