bs-1223R **[Primary Antibody]**

ACAN Rabbit pAb

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DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 176 **SWISS:** P16112

Target: ACAN

Immunogen: KLH conjugated synthetic peptide derived from human ACAN: 101-220/2415.

Purification: affinity purified by Protein A

Concentration: 1mg/ml

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: Aggrecan is a member of a family of large, aggregating proteoglycans (also including versican, brevican and neurocan) which is found in articular cartilage. Aggrecan is composed of three major domains: G1, G2, and G3. Between the G1 and G2 domains there is an interglobulin region (IGD). The IGD region is the major site of cleavage by specific proteases like metalloproteinases (MMPs) and aggrecanase. Aggrecan cleavage has been associated with a number of degenerative diseases including rheumatoid arthritis and osteoarthritis. There is evidence that this family of proteoglycans modulates cell adhesion, migration, and axonal outgrowth in the CNS.

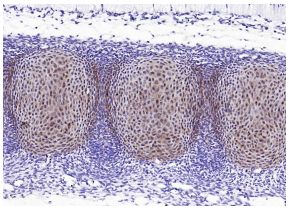
Applications: **IHC-P** (1:100-500)
IHC-F (1:100-500)
IF (1:100-500)

Reactivity: Mouse, Rat
(predicted: Human)

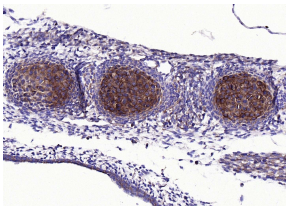
Predicted MW.: 208/248 kDa

Subcellular Location: Secreted

VALIDATION IMAGES



Paraformaldehyde-fixed, paraffin embedded Rat Embryo; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with ACAN Polyclonal Antibody, Unconjugated (bs-1223R) at 1:200 overnight at 4°C, followed by conjugation to the SP Kit (Rabbit, SP-0023) and DAB (C-0010) staining.



Paraformaldehyde-fixed, paraffin embedded Mouse Embryo; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with ACAN Polyclonal Antibody, Unconjugated (bs-1223R) at 1:200 overnight at 4°C, followed by conjugation to the SP Kit (Rabbit, SP-0023) and DAB (C-0010) staining.

SELECTED CITATIONS

- **[IF=18.9]** Jintao Li. et al. Controlled-release hydrogel loaded with magnesium-based nanoflowers synergize immunomodulation and cartilage regeneration in tendon-bone healing. BIOACT MATER. 2024 Jun;36:62 IF ;Rat. 38440323
- **[IF=8.7]** Zhanpeng Xue. et al. Inhibiting synovial inflammation and promoting cartilage repair in rheumatoid arthritis using a matrix metalloproteinase-binding hydrogel. MATER TODAY BIO. 2025 Apr;:101792 IHC ;Mouse. 40343163
- **[IF=7.6]** Lei, Ming, et al. "Mesenchymal stem cell characteristics of dental pulp and periodontal ligament stem cells after< i> in vivo</i> transplantation." Biomaterials (2014). WB ;="Human". 24824581

- **[IF=6.064]** Donglei Liu. et al. Effect of viscoelastic properties of cellulose nanocrystal/collagen hydrogels on chondrocyte behaviors. FRONT BIOENG BIOTECH. 2022; 10: 959409 IHC ;Rat. 36032700
- **[IF=5.806]** Félix Renaudin. et al. NADPH oxidase 4 deficiency attenuates experimental osteoarthritis in mice. RMD OPEN. 2023 Feb;9(1):e002856 IHC ;Mouse. 36810185