bs-11655R **[Primary Antibody]**

ACAN Rabbit pAb

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DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 11595 **SWISS:** Q61282

Target: ACAN

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.

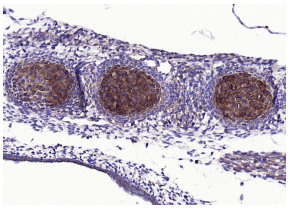
Applications: **IHC-P** (1:100-500)
IHC-F (1:100-500)
IF (1:100-500)

Reactivity: Mouse, Rat
(predicted: Human)

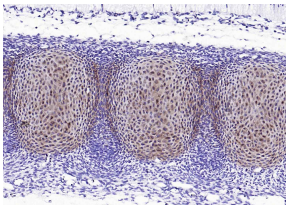
Predicted MW.: 99 kDa

Subcellular Location: Secreted

VALIDATION IMAGES



Paraformaldehyde-fixed, paraffin embedded (mouse embryo); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (ACAN) Polyclonal Antibody, Unconjugated (bs-11655R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Rat embryo); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (ACAN) Polyclonal Antibody, Unconjugated (bs-11655R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.

SELECTED CITATIONS

- **[IF=14.1]** Dong Wang. et al. Nanodrugs Targeting Key Factors of Ferroptosis Regulation for Enhanced Treatment of Osteoarthritis. ADV SCI. 2025 Jan;:2412817 WB,IF ;Mouse. 39840543
- **[IF=13.3]** Han Yin. et al. Chondrocyte-derived apoptotic vesicles enhance stem cell biological function for the treatment of cartilage injury. CHEM ENG J. 2024 Aug;:154501 IF ;Rat. 10.1016/j.cej.2024.154501
- **[IF=7.5]** Ching-Yu Lee. et al. Development and functional evaluation of a hyaluronic acid coated nano-formulation with kaempferol as a novel intra-articular agent for Knee Osteoarthritis treatment. BIOMED PHARMACOTHER. 2024 Jun;175:116717 IHC ;Rat. 38749179

- **[IF=7.3]** Wu Congzi. et al. Subchondral injection of human umbilical cord mesenchymal stem cells ameliorates knee osteoarthritis by inhibiting osteoblast apoptosis and TGF-beta activity. STEM CELL RES THER. 2025 Dec;16(1):1-16 IHC ;Rat. 40346614
- **[IF=5.9]** Qinghe Zeng. et al. Dihydroartemisinin ameliorates hemarthrosis-induced cartilage degeneration by suppressing chondrocyte senescence via activation of Keap1-Nrf2 signaling pathway. J ORTHOP TRANSL. 2025 May;52:192 WB ;Mouse. 10.1016/j.jot.2025.04.006