

# **Product Datasheet**

## **Aggrecan Neoepitope Antibody**

### **NB100-74350SS**

Unit Size: 0.025 ml

Store at -20C. Avoid freeze-thaw cycles.

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#### **Publications: 2**

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Updated 6/15/2014 v.20.1

**NB100-74350SS**

## Aggrecan Neopeptide Antibody

Product Information	
Unit Size	0.025 ml
Concentration	1 mg/ml
Storage	Store at -20C. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.1% Sodium Azide
Purity	Immunogen affinity purified
Buffer	PBS, 30% glycerol
Target Molecular Weight	61 kDa

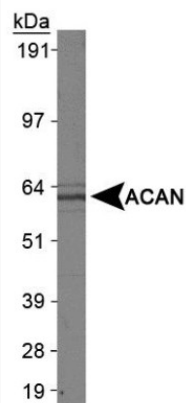
Product Description	
Host	Rabbit
Gene ID	176
Gene Symbol	ACAN
Species	Human, Mouse, Rat, Bovine, Canine, Porcine
Species Reactivity	Porcine, Bovine, Canine, Rat, Mouse, and Human.
Specificity/Sensitivity	Aggrecan Neo (JSCNIT)
Immunogen	A synthetic peptide corresponding to a region of human Aggrecan (within residues 350-400). [UniProt# P16112]

Product Application Details	
Applications	Western Blot, Flow Cytometry, Immunocytochemistry/Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin
Recommended Dilutions	Flow Cytometry, Immunocytochemistry/Immunofluorescence 1:20-1:100, Immunohistochemistry 1:1000, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin 1:1000, Western Blot 1:1000
Application Notes	This Aggrecan Neopeptide antibody is useful for Immunocytochemistry/Immunofluorescence, Immunohistochemistry-paraffin embedded sections, and Western Blot. In WB a band is detected at ~61 kDa representing the neopeptide 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)

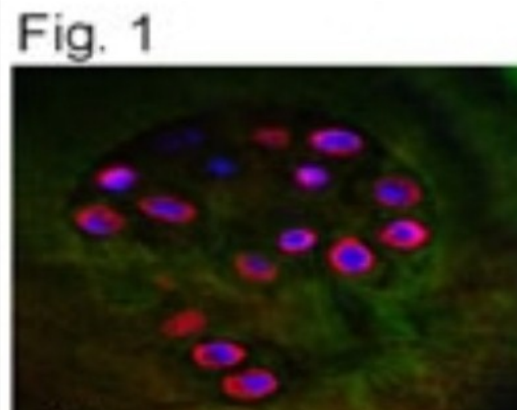


## Images

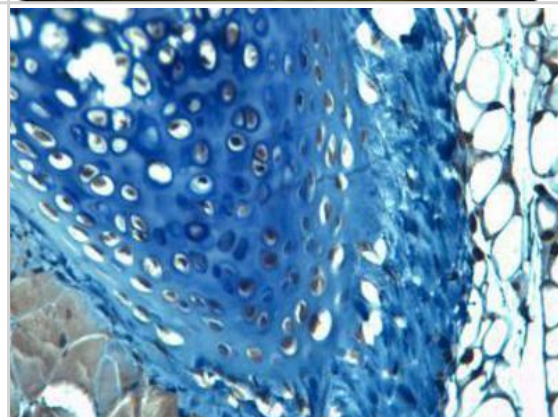
Western Blot: Aggrecan Neopeptide Antibody [NB100-74350] - Analysis of ACAN in L929 whole cell extract using NB100-74350.



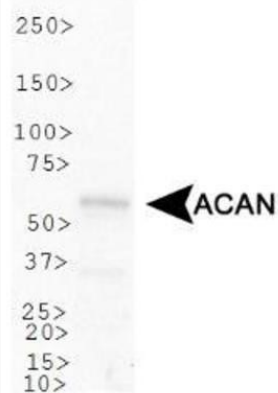
Immunocytochemistry/Immunofluorescence: Aggrecan Neopeptide Antibody [NB100-74350] - Detection of ACAN in OA cartilage using NB100-74350.



Immunohistochemistry: Aggrecan Neopeptide Antibody [NB100-74350] - Analysis of ACAN in mouse cartilage with hematoxylin counterstain.



Western Blot: Aggrecan Neopeptide Antibody [NB100-74350] - Analysis of ACAN in U2OS cell lysate.



## Publications

Huang CY, Lai KY, Hung LF et al. Advanced glycation end products cause collagen II reduction by activating Janus kinase/signal transducer and activator of transcription 3 pathway in porcine chondrocytes. *Rheumatology (Oxford)*. 2011 Aug [PMID: 21482542] (FLOW, IHC-Fr, Porcine)

Liu FC, Huang HS, Huang CY, Yang R, Chang DM, Lai JH, Ho LJ. A benzamide-linked small molecule HS-Cf inhibits TNF- $\alpha$ -induced interferon regulatory factor-1 in Porcine chondrocytes: a potential disease-modifying drug for osteoarthritis therapeutics. *J Clin Immunol*;31(6):1131-42. 2011 Dec. [PMID: 21858617] (IHC, Porcine)



## Procedures

### Western Blot Protocol for Aggrecan Neopeptide Antibody (NB100-74350)

#### Western Blot Protocol

1. Perform SDS-PAGE (4-12% MOPS) on samples to be analyzed, loading 35 ug of total protein per lane.
  2. Transfer proteins to Nitrocellulose according to the instructions provided by the manufacturer of the transfer apparatus.
  3. Rinse membrane with dH<sub>2</sub>O and then stain the blot using Ponceau S for 1-2 minutes to access the transfer of proteins onto the nitrocellulose membrane. Rinse the blot in water to remove excess stain and mark the lane locations and locations of molecular weight markers using a pencil.
  4. Rinse the blot in TBS for approximately 5 minutes.
  5. Block the membrane using 5% NFDM + 1% BSA in TBS + Tween, 1 hour at RT.
  6. Rinse the membrane in dH<sub>2</sub>O and then wash the membrane in wash buffer [TBS + 0.1% Tween] 3 times for 10 minutes each.
  7. Dilute the rabbit anti-ACAN primary antibody (NB100-74350) in blocking buffer and incubate 1 hour at room temperature.
  8. Rinse the membrane in dH<sub>2</sub>O and then wash the membrane in wash buffer [TBS + 0.1% Tween] 3 times for 10 minutes each.
  9. Apply the diluted rabbit-IgG HRP-conjugated secondary antibody in blocking buffer (as per manufacturers instructions) and incubate 1 hour at room temperature.
  10. Wash the blot in wash buffer [TBS + 0.1% Tween] 3 times for 10 minutes each (this step can be repeated as required to reduce background).
  11. Apply the detection reagent of choice in accordance with the manufacturers instructions (Pierce ECL).
- Note: Tween-20 can be added to the blocking or antibody dilution buffer at a final concentration of 0.05-0.2%, provided it does not interfere with antibody-antigen binding.





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### **Limitations**

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

**For more information on our guarantee, please visit [www.novusbio.com/guarantee](http://www.novusbio.com/guarantee).**

