

# Product Datasheet

## Lubricin/PRG4 Antibody NBP1-19048

Unit Size: 0.2 ml

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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**NBP1-19048**

Lubricin/PRG4 Antibody

Product Information	
Unit Size	0.2 ml
Concentration	This product is unpurified. The exact concentration of antibody is not quantifiable.
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	No Preservative
Reconstitution Instructions	Lyophilized powder, reconstituted in distilled water.
Isotype	IgG
Purity	Unpurified
Buffer	Antiserum

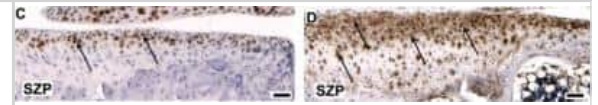
Product Description	
Description	Novus Biologicals Rabbit Lubricin/PRG4 Antibody (NBP1-19048) is a polyclonal antibody validated for use in IHC, WB, ELISA and ICC/IF. Anti-Lubricin/PRG4 Antibody: Cited in 8 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Rabbit
Gene ID	10216
Gene Symbol	PRG4
Species	Human, Mouse
Reactivity Notes	Mouse reactivity reported in scientific literature (PMID: 23705804).
Specificity/Sensitivity	Reacts specifically with human 151 kDa protein
Immunogen	Synthetic peptide derived from N terminal domain of PRG4 protein

Product Application Details	
Applications	Western Blot, Immunohistochemistry-Paraffin, ELISA, Immunocytochemistry/Immunofluorescence, Immunohistochemistry
Recommended Dilutions	Western Blot 1:200-1:1000, ELISA, Immunohistochemistry, Immunocytochemistry/ Immunofluorescence 1:50 - 1:200, Immunohistochemistry-Paraffin
Application Notes	IHC-P, IHC reactivity reported in scientific literature (PMID: 23705804), (23083677).

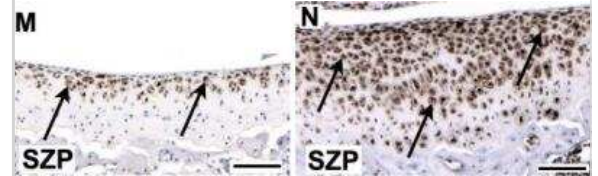


## Images

Immunohistochemistry: Lubricin/PRG4 Antibody [NBP1-19048] - Sections of the tibial articular cartilage of 12-week-old normal Mig-6-flox (C) and Mig-6-flox; Prx1Cre conditional knockout (Mig-6-cko) knees (D) immunostained with antibodies against superficial zone protein (SZP, C, D). In normal articular cartilage, immunostaining is localized to cells mainly in the superficial zone (arrows in C) while in Mig-6-cko articular cartilage, immunostaining is dramatically increased and positive cells are located not only in the superficial zone but also in deeper zones (arrows in D). Scale Bar = 50  $\mu$ m. Image collected and cropped by CiteAb from the following publication ([arthritis-research.biomedcentral.com/articles/10.1186/ar4233](https://arthritis-research.biomedcentral.com/articles/10.1186/ar4233)), licensed under a CC-BY license.



Immunohistochemistry: Lubricin/PRG4 Antibody [NBP1-19048] - Sections of six-week old tibial articular cartilage of normal Mig-6-flox (M) and Mig-6-cko (N) joints immunostained with antibodies against superficial zone protein (SZP, M, N). Enhanced marker expression by cells in the superficial and middle zones is evident in the six-week-old Mig-6-cko articular cartilage compared to control Mig-6-flox articular cartilage (arrows). Scale bar = 100  $\mu$ m. Image collected and cropped by CiteAb from the following publication ([arthritis-research.biomedcentral.com/articles/10.1186/ar4233](https://arthritis-research.biomedcentral.com/articles/10.1186/ar4233)), licensed under a CC-BY license.



## Publications

Ninkovic N, Corpuz J, Stahl A et al. Mesenchymal progenitor–derived proteoglycan 4 regulates the transdifferentiation of chondrocytes into osteoblasts during fracture healing *Stem Cells Translational Medicine* 2025-09-01 [PMID: 40973917]

Azain C, Durán A, Castañeda T et al. Interaction Between Human Skeletal and Mesenchymal Stem Cells Under Physioxia Enhances Cartilage Organoid Formation: A Phenotypic, Molecular, and Functional Characterization *Cells* 2025-09-11 [PMID: 41002388]

Tang, Y;Zhuo, D;Yu, Y;Pu, W;Ma, Y;Zhang, Y;Huang, Y;Zhang, Q;Tang, K;Meng, C;Yang, D;Bai, L;He, D;Jin, L;Zou, H;Xu, H;Zhu, Q;Wang, J;Chen, Y;Liu, J; Single-cell RNA sequencing reveals the CRTAC1+ population actively contributes to the pathogenesis of spinal ligament degeneration by SPP1+ macrophage *Aging cell* 2024-08-19 [PMID: 39158018]

Chen PJ, Dutra EH, Mehta S et al. Age-related changes in the cartilage of the temporomandibular joint *Geroscience* 2020-01-28 [PMID: 31993924] (IF/IHC)

Toledo AG, Golden G, Campos AR et al. Proteomic atlas of organ vasculopathies triggered by *Staphylococcus aureus* sepsis *Nat Commun* 2019-10-11 [PMID: 31604940] (ICC/IF, Mouse)

Clearfield D, Xin X, Yadav S et al. Osteochondral Differentiation of Fluorescent Multi-Reporter Cells on Zonally-Organized Biomaterials *Tissue Eng Part A* 2018-08-23 [PMID: 30136616] (IF/IHC, Mouse)

Shepard JB, Jeong JW, Maihle NJ et al. Transient anabolic effects accompany epidermal growth factor receptor signal activation in articular cartilage in vivo. *Arthritis Res Ther* 2013-05-25 [PMID: 23705804] (IHC-P, Mouse)

Musumeci G, Loreto C, Carnazza ML et al. Acute injury affects lubricin expression in knee menisci. An immunohistochemical study *Ann Anat* 2012-09-12 [PMID: 23083677] (IF/IHC, Human)

Leonardi R, Musumeci G, Sicurezza E, Loreto C. Lubricin in human temporomandibular joint disc: An immunohistochemical study. *Arch Oral Biol.* 2012-01-11 [PMID: 22244189] (IF/IHC, Human)

Leonardi R, Rusu MC, Loreto F et al. Immunolocalization and expression of lubricin in the bilaminar zone of the human temporomandibular joint disc. *Acta Histochemica.* 2011-09-26 [PMID: 21955422]



## Procedures

### **Immunohistochemistry protocol for Lubricin/PRG4 Antibody (NBP1-19048)**

IHC Protocol (NBP1-19048):

For use in IHC-Paraffin: Deparaffinize sections in xylene and graded ethanols. After deparaffinization, digest sections with Proteinase K for six minutes at room temperature followed by incubation in protein block serum free for ten minutes at room temperature.





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### **Products Related to NBP1-19048**

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NBP2-33376H	Blue Marker Antibody (6F4-F6) [HRP]
HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control

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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.

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