

Collagen II Monoclonal Antibody (2B1.5)

Product Details	
Size	500 µL
Species Reactivity	Bovine, Chicken, Human, Mouse, Rat
Published Species	Rabbit, Rat, Pig, Bovine, Sheep, Mouse, Human, Goat, Guinea pig
Host/Isotype	Mouse / IgG2a, kappa
Class	Monoclonal
Type	Antibody
Clone	2B1.5
Conjugate	Unconjugated
Immunogen	A purified preparation of lathyritic type II collagen from embryonic chicken sternum
Form	Liquid
Concentration	0.2 mg/mL
Purification	Protein A
Storage buffer	PBS, pH 7.4, with 0.2% BSA
Contains	0.09% sodium azide
Storage conditions	4° C
RRID	AB_10986605

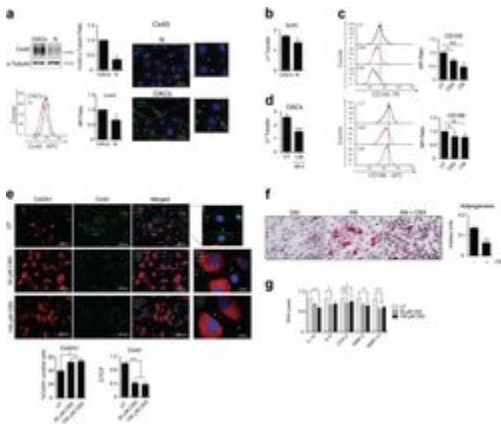
Applications	Tested Dilution	Publications
Western Blot (WB)	1-2 µg/mL	7 Publications
Immunohistochemistry (IHC)	-	48 Publications
Immunohistochemistry (Paraffin) (IHC (P))	1-2 µg/mL	1 Publication
Immunohistochemistry (Frozen) (IHC (F))	-	1 Publication
Immunocytochemistry (ICC/IF)	-	12 Publications
Flow Cytometry (Flow)	Assay-dependent	2 Publications
Miscellaneous PubMed (Misc)	-	1 Publication

Product Specific Information

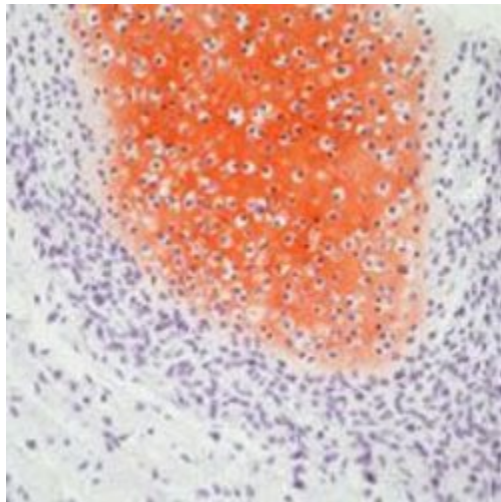
Staining of formalin/paraffin tissues requires digestion of tissue sections with pepsin at 1mg/ml Tris-HCl, pH 2.0 for 15 min at RT or 10 min at 37C.

Collagen II Antibody (MA5-12789)

Fig. 2 Downregulation of Cx43 GJ plaques and GJIC restores chondrocyte redifferentiation in chondrocytes from patients with OA. a OACs express higher levels of Cx43 protein (mainly located in GJ plaques, white arrows) compared with chondrocytes from healthy donors (N), (western blot, flow cytometry and immunofluorescence assays (n = 3; mean +- s.e.m.; * P < 0.05; Mann-Whitney test). b OACs show higher levels of GJIC in comparison with healthy chondrocytes in primary cultures measured by SL/DT assay (n = 3; mean +- s.e.m.; * P < 0.05; Mann-Whitney test). c Flow cytometry analysis shows reduced levels of CD105 and CD166 in OACs treated for 7 days with 100 uM CBX, suggesting reduced chondrocyte dedifferentiation upon GJIC inhibition. Graphs show CD105 and CD166 levels detected in OACs exposed to CBX or chondrogenic medium (CM) (n = 4-5; mean +- s.e.m.; * P < 0.05, ** P < 0.01, *** P < 0.0001; one-way ANOVA). d OACs in chondrogenic (CM) and normal growth medium (UT, DMEM 10% FBS) for 48 h. GJCI was measured by SL/DT assay (n = 3; mean +- s.e.m.; *** P < 0.0001; Mann-Whitney test). e CBX 50 and 100 uM inhibit GJIC in OACs measured by SL/DT assay (Supplementary Fig. 3a). Immunofluorescence analysis of Col2A1 and Cx43 levels in OACs treated with CBX 50 and 100 uM for 24 h. The graphs show the percentage of positive cells for Col2A1 and the CTCF for Cx43 mainly located in the margin of the cells (gap junction plaques, white arrows) (n = 5; mean +- s.e.m.; * P < 0.05, ** P < 0.0 Cell treatment validation info.



Product Images For Collagen II Monoclonal Antibody (2B1.5)



Collagen II Antibody (MA5-12789) in IHC

Formalin-fixed, paraffin-embedded human lung stained with Collagen II antibody using peroxidase-conjugate and AEC chromogen. Note staining of matrix in the bronchial cartilaginous plates.

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Western Blot (7)

Molecular medicine reports

Silencing of longchain noncoding RNA GAS5 in osteoarthritic chondrocytes is mediated by targeting the miR34a/Bcl2 axis.

"MA5-12789 was used in Western Blot to indicate that GAS5 participated in the development of OA by regulating the biological behavior of chondrocytes via the miR,34a/Bcl,2 axis."

Authors: Ji Q,Qiao X,Liu Y,Wang D,Yan J

Species
Human

Dilution
1:5000

Year
2020

Molecular medicine reports

Andrographolide mitigates IL1induced human nucleus pulposus cells degeneration through the TLR4/MyD88/NFB signaling pathway.

"Published figure using Collagen II monoclonal antibody (Product # MA5-12789) in Immunofluorescence"

Authors: Zhang L,Chen Q,Wang H,Yang J,Sheng S

Species
Not Applicable

Dilution
Not Cited

Year
2018

[View more WB references on thermofisher.com](#)

Immunohistochemistry (48)

Frontiers in cell and developmental biology

Epiphyseal Cartilage Formation Involves Differential Dynamics of Various Cellular Populations During Embryogenesis.

"MA5-12789 was used in Immunocytochemistry, Immunohistochemistry to demonstrate that progenies of Gdf5-, Col2-, Prrx1-, and Gli1-positive cells contribute to the growing epiphyseal cartilage in a spatially asymmetrical manner."

Authors: Zhang Y,Annusver K,Sunadome K,Kameneva P,Edwards S,Lei G,Kasper M,Chagin AS,Adameyko I,Xie M

Species
Mouse
Not Applicable

Dilution
Not Cited
Not Cited

Year
2020

Aging

Senolytic activity of small molecular polyphenols from olive restores chondrocyte redifferentiation and promotes a pro-regenerative environment in osteoarthritis.

"Published figure using Collagen II monoclonal antibody (Product # MA5-12789) in Immunohistochemistry"

Authors: Varela-Eirín M,Carpintero-Fernández P,Sánchez-Temprano A,Varela-Vázquez A,Paño CL,Casado-Díaz A,Continente AC,Mato V,Fonseca E,Kandouz M,Blanco A,Caeiro JR,Mayán MD

Species
Human
Not Applicable

Dilution
Not Cited
Not Cited

Year
2020

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More applications with references on thermofisher.com

IHC (P) (1)

IHC (F) (1)

ICC/IF (12)

Flow (2)

Misc (1)

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