

# Connexin 43 Polyclonal Antibody

## Product Details

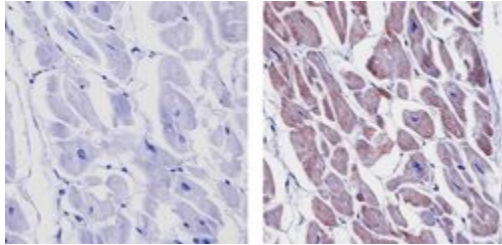
Size	50 µg
Species	Human, Mouse, Rat
Published Species	Dog, Tag, Rat, Virus, Bovine, Cat, Human, Mouse
Expression System	Rabbit / IgG
Class	Polyclonal
Type	Antibody
Conjugate	Unconjugated
Immunogen	Peptide corresponding to a segment of the 3rd cytoplasmic domain (C-terminal portion) of rat connexin 43.
Form	Liquid
Concentration	0.25 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.4
Contains	0.1% sodium azide
Storage Conditions	-20°C
RRID	AB_2533973

Applications	Tested Dilution	Publications
ELISA (ELISA)	0.1-1.0 µg/mL	-
Immunofluorescence (IF)	Assay Dependent	8 Publications
Immunohistochemistry (Frozen) (IHC (F))	1-5 µg/mL	19 Publications
Immunohistochemistry (Paraffin) (IHC (P))	1-5 µg/mL	19 Publications
Western Blot (WB)	2-4 µg/mL	62 Publications
Immunocytochemistry (ICC)	-	23 Publications
Immunohistochemistry (IHC)	-	45 Publications
Immunohistochemistry - Free Floating (IHC (Free))	-	3 Publications
Immunoprecipitation (IP)	-	5 Publications
Miscellaneous PubMed (Misc)	-	24 Publications

## Product Specific Information

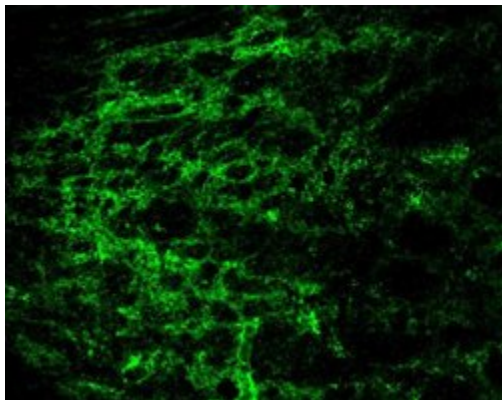
This antibody reacts with connexin 43. On western blots, this antibody detects a 43 kDa protein with mouse brain, rat brain, and human smooth muscle cell extracts. Reactivity with other connexin types has not been observed on western blots (note: samples were not boiled prior to running SDS-PAGE). Positive immunohistostaining is seen with mouse heart and thalamus tissue. Paraffin embedded sections require a heat-induced epitope retrieval (HIER) step. Reactivity of this antibody with connexin 43 is independent of phosphorylation status.

## Product Images For Connexin 43 Polyclonal Antibody



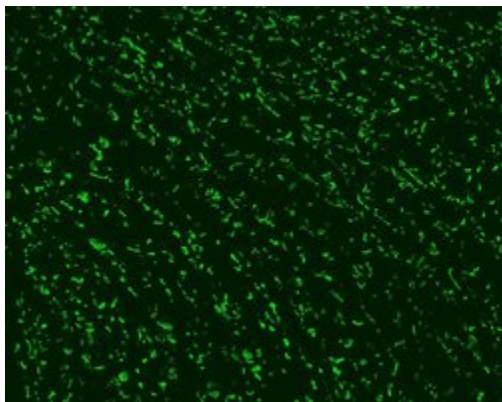
### Connexin 43 Antibody (71-0700) in IHC (P)

Immunohistochemistry analysis of CONNEXIN 43 showing staining in the cytoplasm of paraffin-embedded human heart tissue (right) compared to a negative control without primary antibody (left). To expose target proteins, antigen retrieval was performed using 10mM sodium citrate (pH 6.0), microwaved for 8-15 min. Following antigen retrieval, tissues were blocked in 3% H<sub>2</sub>O<sub>2</sub>-methanol for 15 min at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with a CONNEXIN 43 Rabbit Polyclonal Antibody (Product # 71-0700) diluted in 3% BSA-PBS at a dilution of 1:20 for 1 hour at 37°C in a humidified chamber. Tissues were washed extensively in PBST and detection was performed using an HRP-conjugated secondary antibody followed by colorimetric detection using a DAB kit. Tissues were counterstained with hematoxylin and dehydrated with ethanol and xylene to prep for mounting.



### Connexin 43 Antibody (71-0700) in IHC

Immunofluorescence analysis of Connexin 43 was performed on sections of adult mouse thalamus. Tissue sections on slides were probed for 24 h at 4°C in a humidified chamber with rabbit polyclonal anti-Cx43 (Product # 71-0700) at an antibody concentration of 1-2 µg/mL diluted in 50 mM Tris-HCl, pH 7.4, containing 1.5% NaCl, 0.3% Triton X-100 (TBST) and 4% normal goat serum. After overnight incubation, sections were washed extensively for 1 h in TBST, and detection of primary antibody was performed for 1.5 h at room temperature with AlexaFluor-488-conjugated donkey anti-rabbit diluted 1:600 in TBST. Sections were then washed in TBST, then in TBS (without triton) and then coverslipped with anti-fade medium. Images were taken on a Zeiss Z2 scanning microscope at x40 objective magnification, and show immunofluorescence labelling of Cx43 localized at gap junctions between cardiac myocytes at intercalated discs in adult mouse thalamus. Data courtesy of Dr. James Nagy's lab.



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[View more figures on thermofisher.com](https://www.thermofisher.com)

## 208 References

### Immunocytochemistry (23)

## An improved method for increasing the efficiency of gene transfection and transduction.

"71-0700 was used in Immunocytochemistry-immunofluorescence to compared the transfection and viral transduction efficiency using commercially available transfection reagents."

Authors: Shi B,Xue M,Wang Y,Wang Y,Li D,Zhao X,Li X

Species  
Human

Dilution  
Not Cited

Year  
2020

### Molecules (Basel, Switzerland)

## Cardiomyocyte Progenitor Cells as a Functional Gene Delivery Vehicle for Long-Term Biological Pacing.

"71-0700 was used in Immunocytochemistry-immunofluorescence to show that cardiomyocyte progenitor cells expressing HCN4-GFP functionally couple to neonatal rat ventricular myocytes and induce physiologically controlled pacemaker activity."

Authors: Végh AMD,den Haan AD,Cóccera Ortega L,Verkerk AO,Sluijter JPG,Bakker D,van Amersfoorth S,van Veen TAB,Klerk M,Seppen J,de Bakker JMT,Christoffels VM,Geerts D,Goumans MJTH,Tan HL,Boink GJJ

Species  
Human

Dilution  
Not Cited

Year  
2019

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

## Immunohistochemistry (45)

### The Journal of clinical investigation

## Ankyrin-B dysfunction predisposes to arrhythmogenic cardiomyopathy and is amenable to therapy.

"71-0700 was used in Immunohistochemistry-immunofluorescence to evidence for targeted activation of the WNT/-catenin pathway as a potential treatment for this disease."

Authors: Roberts JD,Murphy NP,Hamilton RM,Lubbers ER,James CA,Kline CF,Gollob MH,Krahn AD,Sturm AC,Musa H,El-Refaey M,Koenig S,Aneq MÁ,Hoorntje ET,Graw SL,Davies RW,Rafiq MA,Koopmann TT,Aafaqi S,Fatah M,Chiasson DA,Taylor MR,Simmons SL,Han M,van Opbergen CJ,Wold LE,Sinagra G,Mittal K,Tichnell C,Murray B,Codima A,Nazer B,Nguyen DT,Marcus FI,Sobriera N,Lodder EM,van den Berg MP,Spears DA,Robinson JF,Ursell PC,Green AK,Skane AC,Tang AS,Gardner MJ,Hegele RA,van Veen TA,Wilde AA,Healey JS,Janssen PM,Mestroni L,van Tintelen JP,Calkins H,Judge DP,Hund TJ,Scheinman MM,Mohler PJ

Species  
Mouse

Dilution  
1:1000

Year  
2019

### Neurotherapeutics : the journal of the American Society for Experimental NeuroTherapeutics

## Mitochondrial Modulation by Dichloroacetate Reduces Toxicity of Aberrant Glial Cells and Gliosis in the SOD1G93A Rat Model of Amyotrophic Lateral Sclerosis.

"71-0700 was used in Immunohistochemistry to show that AbGC metabolic phenotype is related to their toxicity to motor neurons (MNs) and indicate that its modulation can reduce glial mediated pathology in the spinal cord."

Authors: Martínez-Palma L,Miquel E,Lagos-Rodríguez V,Barbeito L,Cassina A,Cassina P

Species  
Not Applicable

Dilution  
1:250

Year  
2019

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

## More applications with references on thermofisher.com

WB (62)

IP (5)

IHC (F) (19)

Misc (24)

IF (8)

IHC (Free) (3)

IHC (P) (19)

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