

# Connexin 30 Polyclonal Antibody (Z-PP9)

## Product Details

|                    |   |
|--------------------|---|
| Size               | 50 µg   |
| Species Reactivity | Cat, Human, Mouse, Rat  |
| Published Species  | Rat, Non-human primate, Cat, Mouse, Human, Chicken, Xenopus                             |
| Host/Isotype       | Rabbit / IgG  |
| Class              | Polyclonal  |
| Type               | Antibody  |
| Clone              | Z-PP9   |
| Conjugate          | Unconjugated  |
| Immunogen          | A synthetic peptide derived from the unique C-terminus of the mouse Connexin 30 protein |
| Form               | Liquid  |
| Concentration      | 0.25 mg/mL  |
| Purification       | Antigen affinity chromatography   |
| Storage buffer     | PBS, pH 7.4   |
| Contains           | 0.1% sodium azide   |
| Storage conditions | -20°C   |
| RRID               | AB_2533979  |

| Applications                                      | Tested Dilution | Publications    |
|---|-----------------|-----------------|
| Western Blot (WB)                                 | 1-3 µg/mL       | 12 Publications |
| Immunohistochemistry (IHC)                        | -               | 16 Publications |
| Immunohistochemistry (Paraffin) (IHC (P))         | 1:20-1:200      | 2 Publications  |
| Immunohistochemistry (Frozen) (IHC (F))           | Assay-dependent | 9 Publications  |
| Immunohistochemistry - Free Floating (IHC (Free)) | -               | 1 Publication   |
| Immunocytochemistry (ICC/IF)                      | 1:100-1:500     | 16 Publications |
| ELISA (ELISA)                                     | 0.1-1 µg/mL     | -               |
| Immunoprecipitation (IP)                          | -               | 1 Publication   |
| Miscellaneous PubMed (Misc)                       | -               | 9 Publications  |

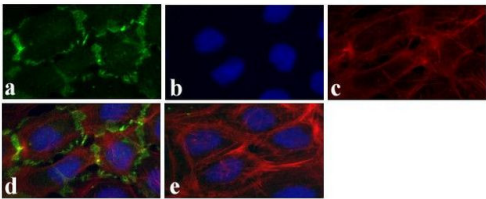
## Product Specific Information

This antibody is specific for the Connexin 30. Cross-reactivity with the highly related Connexin 26 protein or with other Connexin family members has not been detected. Reactivity of this antibody has been confirmed by western blotting using cell lysates derived from adult rat, mouse, human, and cat brains.

Product Images For Connexin 30 Polyclonal Antibody (Z-PP9)

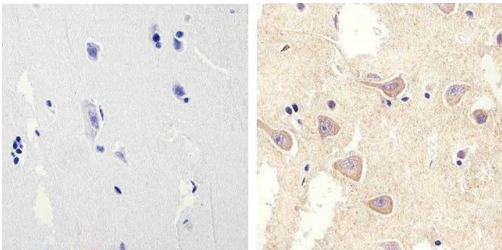
Connexin 30 Antibody (71-2200) in ICC/IF

Immunofluorescence analysis of Connexin-30 was done on 70% confluent log phase Caco-2 cells. The cells were fixed with 4% paraformaldehyde for 15 minutes, permeabilized with 0.25% Triton™ X-100 for 10 minutes, and blocked with 5% BSA for 1 hour at room temperature. The cells were labeled with Connexin-30 Rabbit polyclonal Antibody (Product # 71-2200) at 2 µg/mL in 1% BSA and incubated for 3 hours at room temperature and then labeled with Alexa Fluor 488 Goat Anti-Rabbit IgG Secondary Antibody (Product # A-11008) at a dilution of 1:400 for 30 minutes at room temperature (Panel a: green). Nuclei (Panel b: blue) were stained with SlowFade® Gold Antifade Mountant DAPI (Product # S36938). F-actin (Panel c: red) was stained with Alexa Fluor 594 Phalloidin (Product # A12381). Panel d is a merged image showing junctional localization. Panel e shows no primary antibody control. The images were captured at 20X magnification.



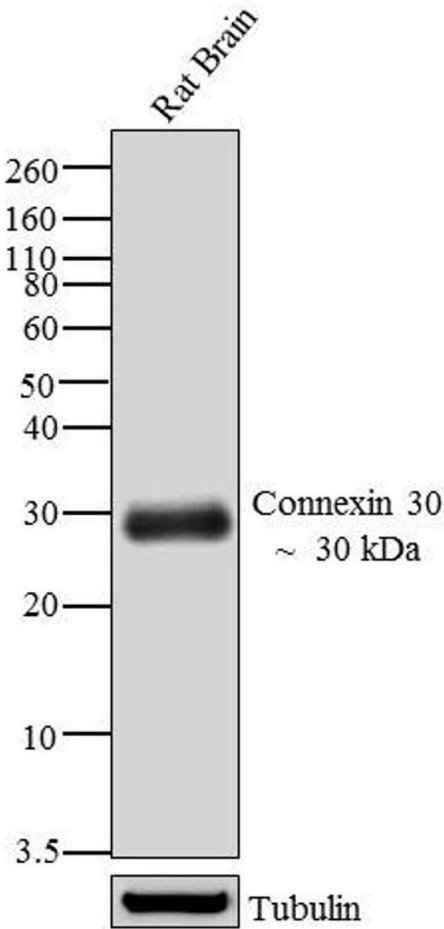
Connexin 30 Antibody (71-2200) in IHC (P)

Immunohistochemistry analysis of Connexin 30 showing staining in the cytoplasm of paraffin-embedded human brain 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% H2O2-methanol for 15 min at room temperature, washed with ddH2O and PBS, and then probed with a Connexin 30 Rabbit Polyclonal Antibody (Product # 71-2200) diluted in 3% BSA-PBS at a dilution of 1:100 overnight at 4°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 30 Antibody (71-2200) in WB

Western blot analysis of Connexin 30 was performed by loading 20 µg of Rat Brain tissue lysate using Novex®NuPAGE® 12 % Bis-Tris gel (Product # NP0342BOX), XCell SureLock Electrophoresis System (Product # EI0002), Novex® Sharp Pre-Stained Protein Standard (LC5800), and iBlot® 2 Dry Blotting System (IB21001). Proteins were transferred to a nitrocellulose membrane and blocked with 5% skim milk at 4°C overnight. Connexin 30 was detected at ~ 30 kDa using Connexin 30 Rabbit Polyclonal Antibody (Product # 36-6200) at 1-2 µg /mL in 5% skim milk for 3 hour at room temperature on a rocking platform. Goat Anti-Rabbit IgG - HRP Secondary Antibody (G21234) at 1:5000 dilution was used and chemiluminescent detection was performed using Pierce™ ECL Western Blotting Substrate (Product # 32106).



Western Blot (12)

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| <p>Nature communications</p> <p><b>Physiological synaptic activity and recognition memory require astroglial glutamine.</b></p> <p>"71-2200 was used in Western Blot to show that the role of glutamine is dependent on the opening of astroglial connexin 43 hemichannels upon activity, and provide evidence for the functional relevance of astroglial glutamine in physiological synaptic transmission and cognition."</p> <p>Authors: Cheung G,Bataveljic D,Visser J,Kumar N,Moulard J,Dallérac G,Mozheiko D,Rollenhagen A,Ezan P,Mongin C,Chever O,Bemelmans AP,Lübke J,Leray I,Rouach N</p> | <p>Year<br/>2022</p> <p>Species<br/>Mouse</p> <p>Dilution<br/>1:500</p>    |
| <p>The Journal of general physiology</p> <p><b>A novel voltage-clamp/dye uptake assay reveals saturable transport of molecules through CALHM1 and connexin channels.</b></p> <p>"71-2200 was used in Western Blotting to develop a novel technique that allows kinetic analysis of molecular permeation through connexin and CALHM1 channels in Xenopus oocytes rendered translucent."</p> <p>Authors: Gaete PS,Lillo MA,López W,Liu Y,Jiang W,Luo Y,Harris AL,Contreras JE</p>  | <p>Year<br/>2020</p> <p>Species<br/>Xenopus</p> <p>Dilution<br/>1:1000</p> |

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Immunohistochemistry (16)

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|--|---|
| <p>Frontiers in cellular neuroscience</p> <p><b>Spike Generators and Cell Signaling in the Human Auditory Nerve: An Ultrastructural, Super-Resolution, and Gene Hybridization Study.</b></p> <p>"71-2200 was used in Immunohistochemistry to gain information about the molecular instruments in human auditory nerve processing and deviations, and ways to perform electric modeling of prosthetic devices."</p> <p>Authors: Liu W,Luque M,Li H,Schrott-Fischer A,Glueckert R,Tylstedt S,Rajan G,Ladak H,Agrawal S,Rask-Andersen H</p> | <p>Year<br/>2023</p> <p>Species<br/>Human</p>                           |
| <p>Frontiers in cell and developmental biology</p> <p><b>Virally Mediated Connexin 26 Expression in Postnatal Scala Media Significantly and Transiently Preserves Hearing in Connexin 30 Null Mice.</b></p> <p>"71-2200 was used in Immunohistochemistry to demonstrate the first successful cochlear gene therapy treatment in mouse models by virally expressing a companion gene of Gjb6."</p> <p>Authors: Zhang L,Wang W,Kim SM,Wang J,Zhou B,Kong W,Zheng J,Lin X</p>   | <p>Year<br/>2022</p> <p>Species<br/>Mouse</p> <p>Dilution<br/>1:200</p> |

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- IHC (P) (2)
- IHC (F) (9)
- IHC (Free) (1)
- ICC/IF (16)
- IP (1)
- Misc (9)

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