

For Research Use Only

# Connexin 43 Recombinant antibody

Catalog Number: 80543-1-RR



## Basic Information

<b>Catalog Number:</b> 80543-1-RR	<b>GenBank Accession Number:</b> BC026329	<b>Purification Method:</b> Protein A purification
<b>Concentration:</b> 1000 ug/ml	<b>GeneID (NCBI):</b> 2697	<b>CloneNo.:</b> 306
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P17302	<b>Recommended Dilutions:</b> WB 1:5000-1:50000
<b>Isotype:</b> IgG	<b>Full Name:</b> gap junction protein, alpha 1, 43kDa	<b>IHC 1:1000-1:4000</b>
<b>Immunogen Catalog Number:</b> AG25533	<b>Calculated MW:</b> 43 kDa	<b>IF-P 1:50-1:500</b>
	<b>Observed MW:</b> 43 kDa	<b>IF/ICC 1:125-1:500</b>

## Applications

<b>Tested Applications:</b> WB, IHC, IF/ICC, IF-P, ELISA	<b>Positive Controls:</b>
<b>Species Specificity:</b> human, mouse, rat, pig	<b>WB :</b> mouse brain tissue, rat brain tissue, pig brain tissue, rat cerebellum tissue
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	<b>IHC :</b> mouse heart tissue,
	<b>IF-P :</b> mouse heart tissue,
	<b>IF/ICC :</b> HeLa cells,

## Background Information

Connexin 43 (Cx43, also known as gap junction alpha-1), a member of connexin family, plays essential roles in gap junction communication that facilitates direct communication among adjacent cells (PMID: 12270943). Usually, six connexin proteins oligomerize into a hemi-channel or connexon during intercellular channel formation (PMID: 12270943). Mutations of Connexin 43 may cause a series of diseases such as oculodentodigital dysplasia (ODDD), syndactyly 3 (SDTY3), hypoplastic left heart syndrome 1 (HLHS1) and so on (PMID: 18161618, 1472936, 1147490).

## Storage

**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
**Aliquoting is unnecessary for -20°C storage**

For technical support and original validation data for this product please contact:

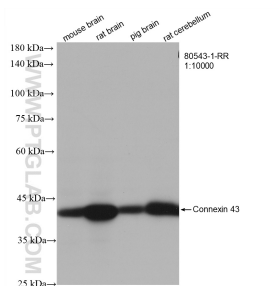
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

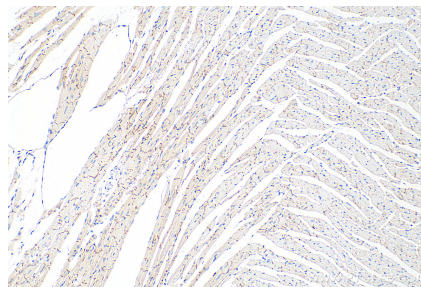
W: [ptgcn.com](http://ptgcn.com)

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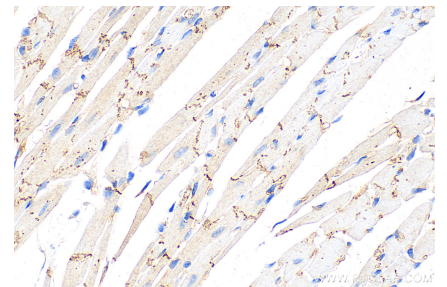
## Selected Validation Data



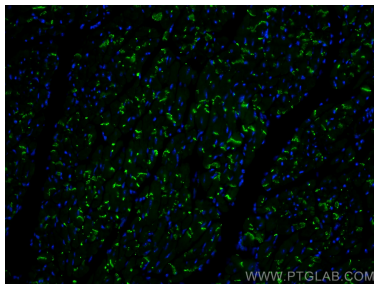
Various lysates were subjected to SDS PAGE followed by western blot with 80543-1-RR (Connexin 43 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



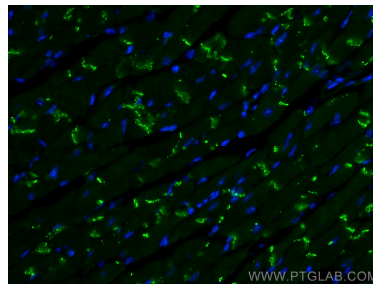
Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 80543-1-RR (Connexin 43 antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



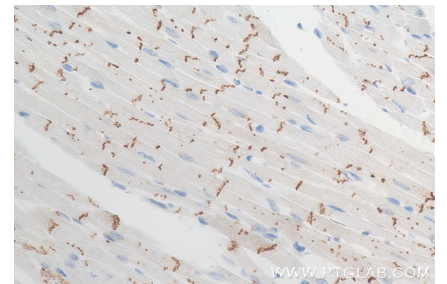
Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 80543-1-RR (Connexin 43 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



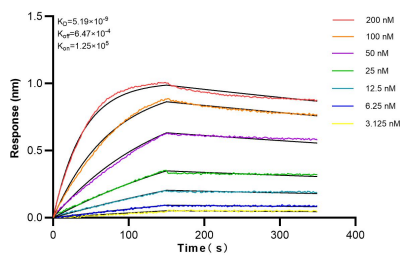
Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using Connexin 43 antibody (80543-1-RR, Clone: 3O6) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



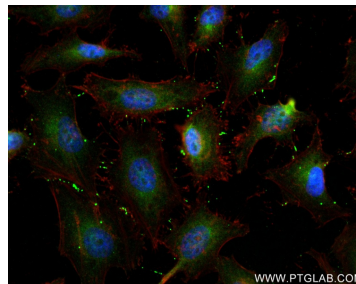
Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using Connexin 43 antibody (80543-1-RR, Clone: 3O6) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 80543-1-RR (Connexin 43 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Bioluminescence resonance energy transfer (BRET) kinetic assays of 80543-1-RR against Human Connexin 43 were performed. The affinity constant is 5.19 nM.



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using Connexin 43 antibody (80543-1-RR, Clone: 3O6) at dilution of 1:250 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).