

## Rabbit Anti-Connexin-40 antibody

SL1050R

**Product Name** Connexin-40

**Chinese Name** 间隙连接蛋白 40 抗体

**Alias** connexin 40; connexin40; CX40; Gap junction alpha 5 protein; gap junction protein alpha 5 40kD (connexin 40); gap junction protein alpha 5; GJA5; MGC11185; CXA5\_HUMAN; Gap junction alpha-5 protein; Connexin-40; Cx40.

**Research Area** Cardiovascular Signal transduction Cell adhesion molecule

**Immunogen Species** Rabbit

**Clonality** Polyclonal

**React Species** Human,Mouse

**Applications** IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 (Paraffin sections need antigen repair)  
not yet tested in other applications.  
optimal dilutions/concentrations should be determined by the end user.

**Theoretical molecular weight** 40kDa

**Cellular localization** The cell membrane

**Form** Liquid

**Concentration** 1mg/ml

**immunogen** KLH conjugated synthetic peptide derived from human Connexin-40: 301-358/358 <Cytoplasmic>

**Lsotype** IgG

**Purification** affinity purified by Protein A

**Buffer Solution** Human,Mouse 1M TBS(pH7.4) with 1% BSA, Human,Mouse 3% Proclin300 and 50% Glycerol.

**Storage** Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

**Attention** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

**PubMed**

[PubMed](#)

This gene is a member of the connexin gene family. The encoded protein is a component of gap junctions, which are composed of arrays of intercellular channels that provide a route for the diffusion of low molecular weight materials from cell to cell. Mutations in this gene may be associated with atrial fibrillation. Alternatively spliced transcript variants encoding the same isoform have been described. [provided by RefSeq, Jul 2008]

**Function:**

One gap junction consists of a cluster of closely packed pairs of transmembrane channels, the connexons, through which materials of low MW diffuse from one cell to a neighboring cell.

**Subunit:**

A connexon is composed of a hexamer of connexins.

**Subcellular Location:**

Cell membrane; Multi-pass membrane protein. Cell junction, gap junction.

**DISEASE:**

Familial atrial standstill (FAS) [MIM:108770]: Atrial standstill is an extremely rare arrhythmia, characterized by the absence of electrical and mechanical activity in the atria. Electrocardiographically, it is characterized by bradycardia, the absence of P waves, and a junctional narrow complex escape rhythm. Note=The disease may be caused by mutations affecting distinct genetic loci, including the gene represented in this entry. A rare GJA5 genotype has been detected in combination with a mutation in SCN5A in a large family with atrial standstill.

Familial atrial fibrillation 11 (ATFB11) [MIM:614049]: A familial form of atrial fibrillation, a common sustained cardiac rhythm disturbance. Atrial fibrillation is characterized by disorganized atrial electrical activity and ineffective atrial contraction promoting blood stasis in the atria and reduces ventricular filling. It can result in palpitations, syncope, thromboembolic stroke, and congestive heart failure. Note=The disease is caused by mutations affecting the gene represented in this entry.

**Similarity:**

Belongs to the connexin family. Alpha-type (group II) subfamily.

**SWISS:**

P36382

**Gene ID:**

2702

**Database links:**

**Product  
Detail**

[Entrez Gene: 2702](#) Human

[Omim: 121013](#) Human

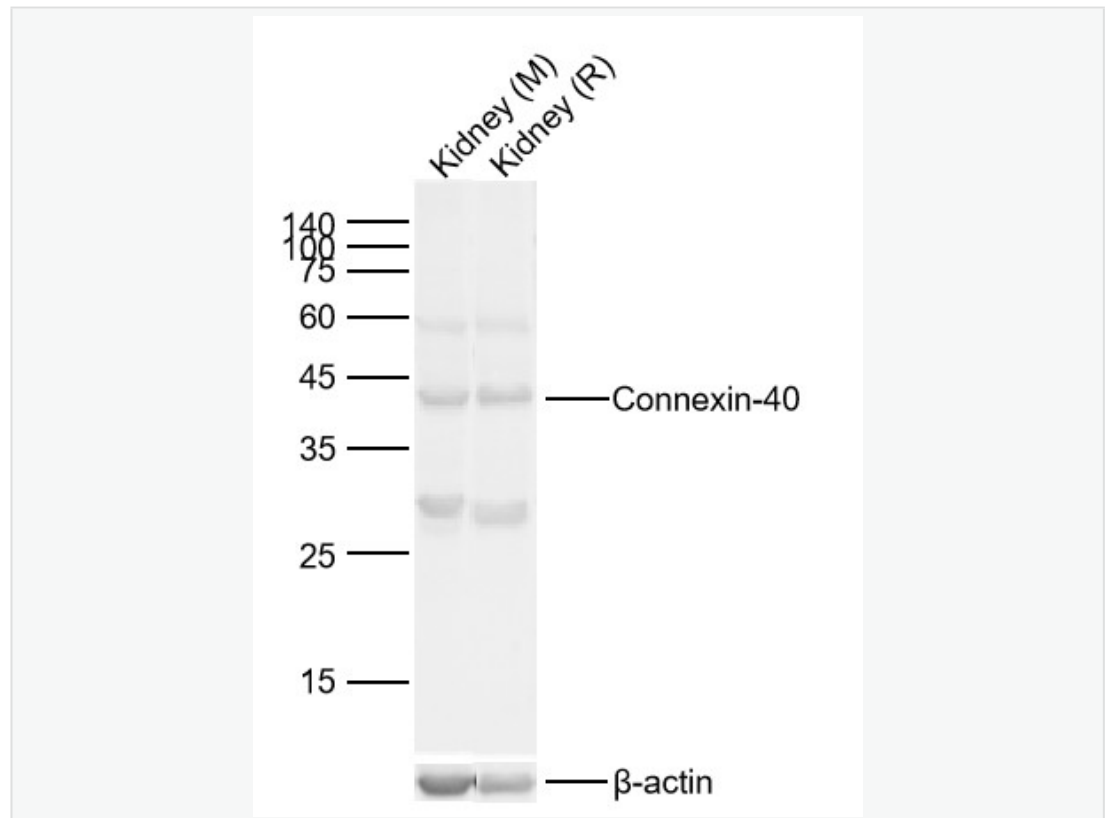
[SwissProt: P36382](#) Human

[Unigene: 447968](#) Human

Cx40 间隙连接蛋白 40 是构成细胞间的通道，小分子成份可以借此在细胞间扩散。Connexin-40 也是心肌间隙连接的主要蛋白之一。

此外，星形细胞、成纤维细胞、平滑肌和肾等组织也有表达 Connexin40。

Product  
Picture



Sample:

Lane 1: Mouse Kidney Lysates

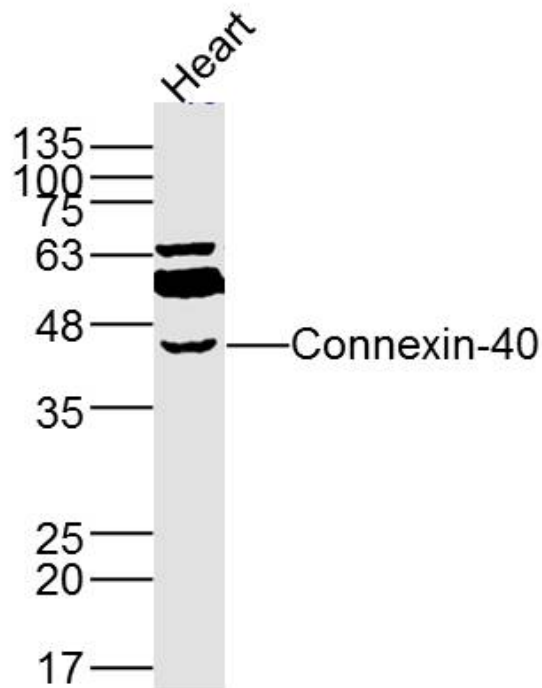
Lane 2: Rat Kidney Lysates

Primary: Anti-Connexin-40 (SL1050R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 40kDa

Observed band size: 40kDa



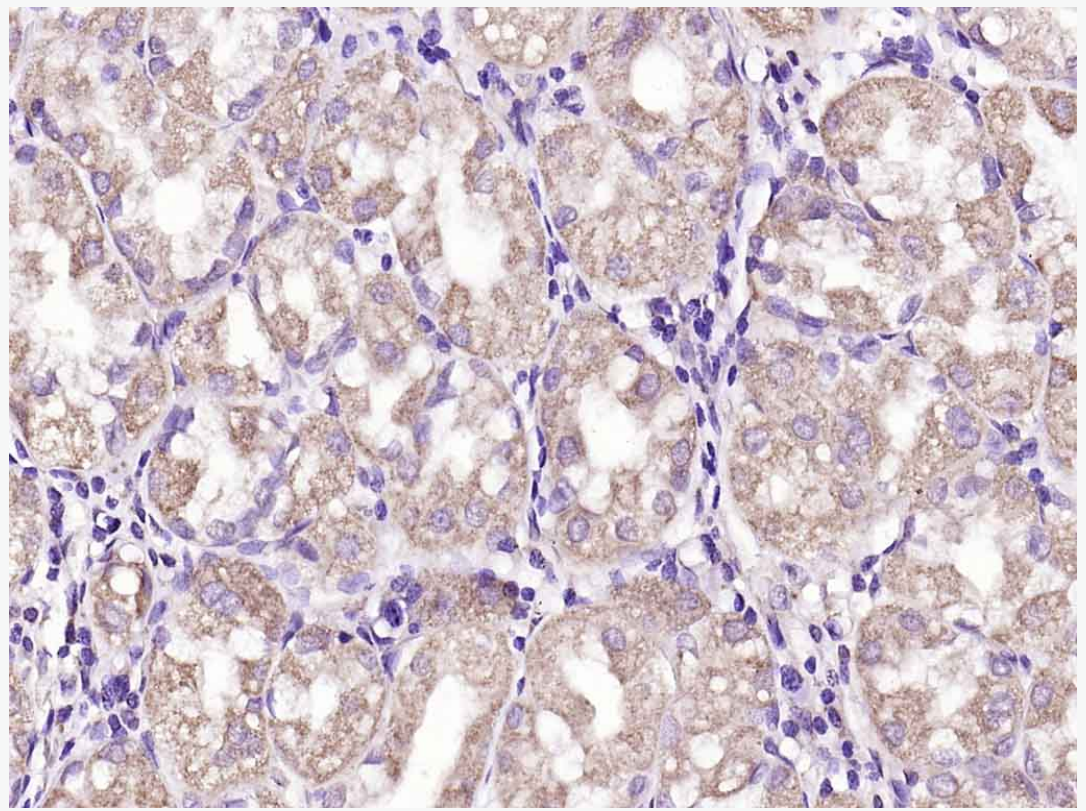
Sample: Heart (Mouse) Lysate at 40 ug

Primary: Anti-Connexin-40 (SL1050R) at 1/500 dilution

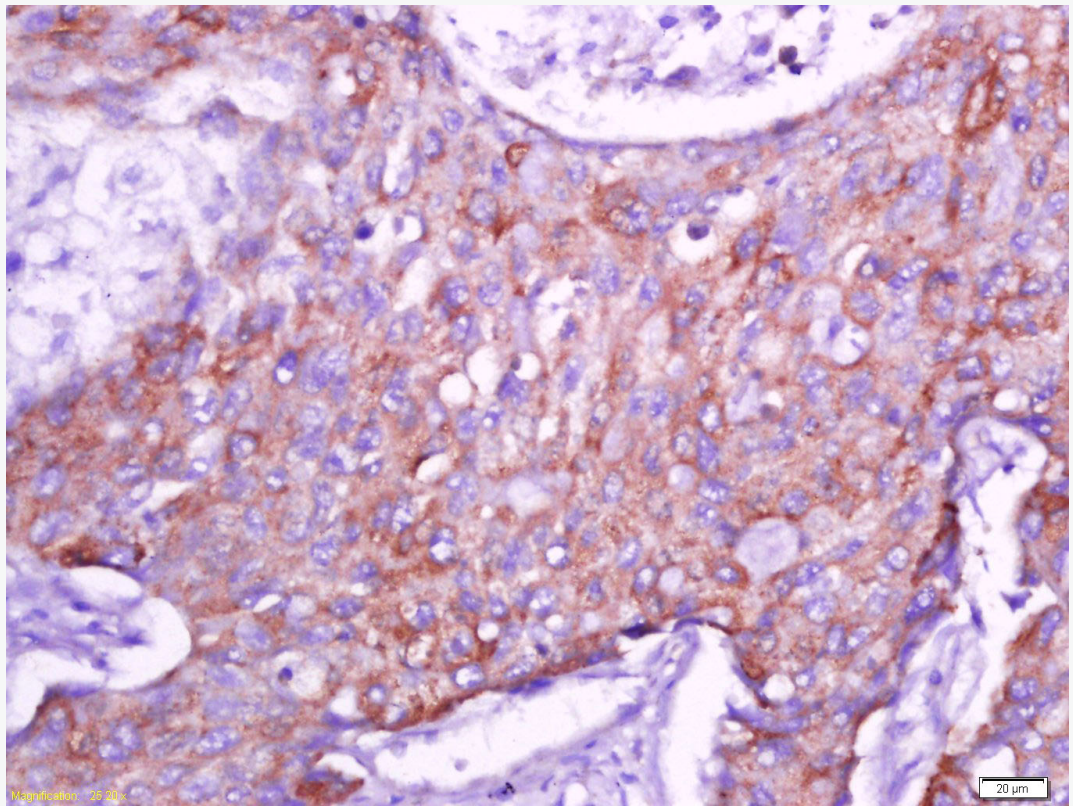
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 40 kD

Observed band size: 40 kD



Paraformaldehyde-fixed, paraffin embedded (human gastric); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Connexin-40 ) Polyclonal Antibody, Unconjugated (SL1050R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



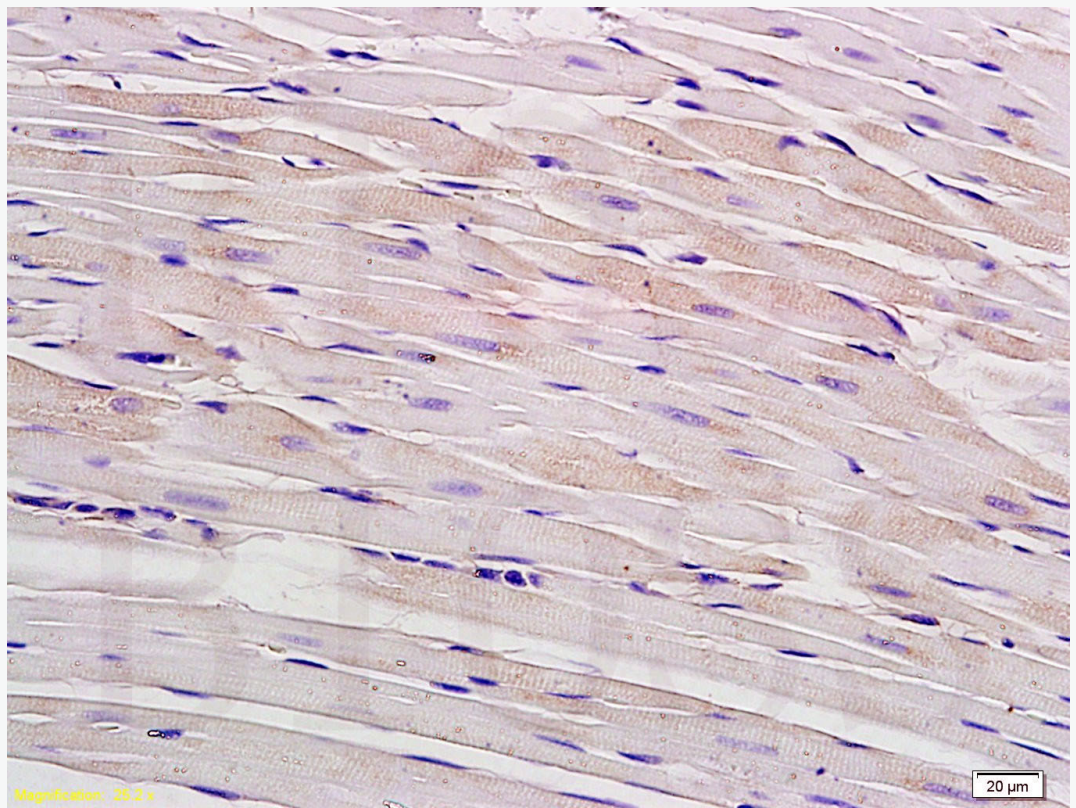
Tissue/cell: human lung carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer ( Human,Mouse 1M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min;

Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-Connexin-40 Polyclonal Antibody, Unconjugated(SL1050R)

1:500, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



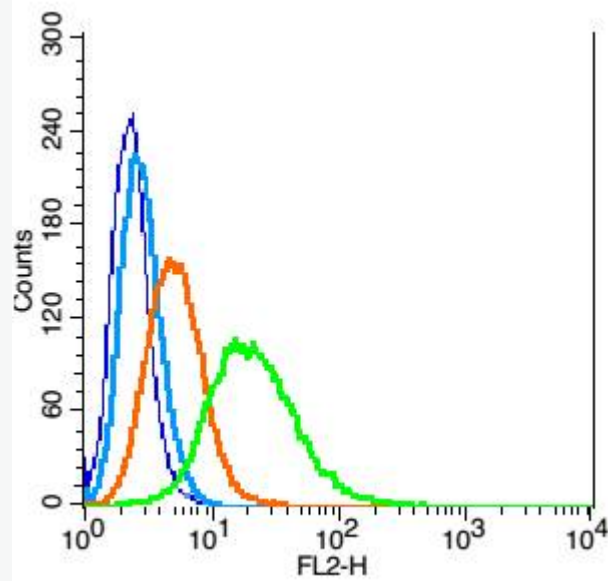
Tissue/cell: rat myocardium tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer ( Human,Mouse 1M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min;

Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-Connexin-40 Polyclonal Antibody, Unconjugated(SL1050R)

1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Blank control: RSC96(blue).

Primary Antibody:Rabbit Anti- Connexin-40 antibody(SL1050R), Dilution: 1 $\mu$ g in 100  $\mu$ L 1X PBS containing 0.5% BSA;

Isotype Control Antibody: Rabbit IgG(orange) ,used under the same conditions );

Secondary Antibody: Goat anti-rabbit IgG-PE(white blue), Dilution: 1:200 in 1 X PBS containing 0.5% BSA.

#### Protocol

The cells were fixed with 2% paraformaldehyde (10 min). Antibody (SL1050R, 1 $\mu$ g /1x10<sup>6</sup> cells) were incubated for 30 min on the ice, followed by 1 X PBS containing 0.5% BSA + 1 0% goat serum (15 min) to block non-specific protein-protein interactions. Then the Goat Anti-rabbit IgG/PE antibody was added into the blocking buffer mentioned above to react with the primary antibody of SL1050R at 1/200 dilution for 30 min on ice. Acquisition of 20,000 events was



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performed.