



**Qty:** 100 µg/400 µL

**Rabbit anti-Connexin 57 (Mid)**

**Catalog No.** 40-5000

**Lot No.**

## **Rabbit anti-Connexin 57 (Mid)**

### **FORM**

This polyclonal antibody is supplied as a 400 µL aliquot at a concentration of 0.25 mg/mL in phosphate buffered saline (pH 7.4) containing 0.1% sodium azide. This antibody is epitope-affinity purified from rabbit antiserum.

**PAD:** ZMD.470

### **IMMUNOGEN**

Synthetic peptide derived from an internal region of the mouse, rat, Chinese hamster and golden hamster connexin 57 (Cx57) proteins

### **SPECIFICITY**

This antibody is specific for the internal region of the connexin 57 protein. On Western blots, it identifies the target bands at ~57 and 64 kDa. The 64 kDa band likely represents a post-translationally modified form of Cx57, consistent with the multiple phosphorylation sites present on the protein.

### **REACTIVITY**

Reactivity has been confirmed with mouse retina homogenates by Western blotting and with mouse retina by immunohistochemistry and immunofluorescence. Based on amino acid sequence identity, reactivity with rat, Chinese hamster and golden hamster is expected.

<b>Sample</b>	<b>Western Blotting</b>	<b>Immunohistochemistry (frozen)*</b>	<b>Immunofluorescence*</b>
Mouse	+++	+++	+++
Rat	ND	ND	ND
Chinese hamster	ND	ND	ND
Golden hamster	ND	ND	ND

(Excellent +++, Good++, Poor +, No reactivity 0, Not applicable N/A, Not Determined ND)

### **USAGE**

Working concentrations for specific applications should be determined by the investigator. Appropriate concentrations will be affected by several factors, including secondary antibody affinity, antigen concentration, sensitivity of detection method, temperature and length of incubations, etc. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

**Western Blotting:** 1-3 µg/mL  
**Immunohistochemistry (frozen)\*:** 2-3 µg/mL  
**Immunofluorescence\*:** 2-3 µg/mL

\*Mouse retina sections were fixed in 1% paraformaldehyde and cryopreserved prior to use in IHC and IF applications.

### **STORAGE**

Store at 2-8°C for up to one month. Store at -20°C for long-term storage. Avoid repeated freezing and thawing.

(cont'd)

**BACKGROUND**

Mouse connexin 57 (Cx57), which corresponds to the Cx62 human ortholog<sup>1</sup>, is a gap junction protein whose gene is located on mouse chromosome 4, where the genes for Cx30.3, Cx31, Cx31.1, and Cx37 also reside.<sup>2</sup> Cx57 mRNA is abundantly expressed in the retina<sup>3</sup> and weakly in the thymus of adult mice but is absent from other tissues, including the brain<sup>4</sup>. In the retina, Cx57 expression is restricted to horizontal cells, where it is responsible for more than 99% of tracer coupling between cells.<sup>4</sup>

**REFERENCES**

1. Willecke K, et al. *Biol Chem* 383:725-737, 2002.
2. Manthey D, et al. *J Biol Chem* 274:14716-14723, 1999.
3. Deans MR & Paul DL. *Cell Commun Adhes* 8:361-366, 2001.
4. Hombach S, et al. *Eur J Neurosci* 19:2633-2640, 2004.

**RELATED PRODUCTS**

<b>Product</b>	<b>Conjugate</b>	<b>Cat. No.</b>
Protein A	Sepharose® 4B	10-1041
rec-Protein G	Sepharose® 4B	10-1241

<b>Conjugate</b>	<b>ZyMAX™ Goat x Rabbit IgG (H+L)</b>	<b>ZyMAX™ Goat x Mouse IgG (H+L)</b>
Purified	81-6100	81-6500
FITC	81-6111	81-6511
TRITC	81-6114	81-6514
Cy™3	81-6115	81-6515
Cy™5	81-6116	81-6516
HRP	81-6120	81-6520
AP	81-6122	81-6522
Biotin	81-6140	81-6540

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