



Qty: 100µg/400 µL

Rabbit anti-Connexin 31

Catalog No. 36-5100

Lot No.

## Rabbit anti-Connexin 31

### 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.356

### IMMUNOGEN

Synthetic peptide derived from the C-terminal region of mouse connexin 3 protein.

### SPECIFICITY

This antibody reacts with the ~32 kDa mouse connexin 31 on Western blots. The band observed at ~ 62 kDa is probably due to dimerization of connexin 31. Several higher bands of unknown origin are observed in western blots of mouse skin homogenates.

### REACTIVITY

Reactivity has been confirmed with mouse skin homogenates.

Sample	Western Blotting	Immunofluorescence	Immunohistochemistry (paraformaldehyde-perfused)	Immunohistochemistry (Fixed Tissue)
Mouse	+++	+++	+++	+++

(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.

**Immunofluorescence:** 1-3 µg/mL  
**Immunohistochemistry:** 1-3 µg/mL  
**Western Blotting:** 1-3 µg/mL

### 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)

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**BACKGROUND**

Connexin 31 (Cx31) is a 270 amino acid gap junction protein in mouse and rat with a predicted molecular weight of ~31 kDa.<sup>1</sup> Connexin 31 is encoded by the gene Gjb3, and is expressed in a complex pattern throughout mouse development. During early mouse development, Cx31 is present in both the inner cell mass and the trophectoderm, but it is restricted to cells derived from the trophectoderm lineage after implantation.<sup>2</sup> In adult female rodents, Cx31 is expressed in the granular layer of the placenta, and the lack of Cx31 leads to transient dysmorphogenesis affecting embryonic survival.<sup>3</sup> In adult male rodents, Cx31 is expressed in the seminiferous epithelium of testis and may play a role in cell-cell communication during spermatogenesis.<sup>4</sup>

**REFERENCES**

1. Hennemann, et al. *Eur J Cell Biol* 57:51-58, 1992.
2. Dahl, et al. *J Cell Sci* 109(Pt 1):191-197, 1996.
3. Plum, et al. *Dev Biol* 231:334-347, 2001.
4. Mok, et al. *FEBS Lett* 453:243-248, 1999.

**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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