



Qty: 100 µg/400 µL

Rabbit anti-Claudin-8 (C-term)

Catalog No. 40-2600

Lot No.

Rabbit anti-Claudin-8 (C-term)

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.446

IMMUNOGEN

Synthetic peptide derived from the C-terminal region of human claudin-8

SPECIFICITY

This antibody reacts with the ~23 kDa human claudin-8 protein. Bands of unknown origin were also observed at ~15 and 80 kDa.

REACTIVITY

Reactivity has been confirmed with human T84 colorectal carcinoma cell lysates by Western blotting, and with T84, HT29/6D, and MDCK-C7 cell lines by immunofluorescence.

Sample	Immunofluorescence	Western Blotting
Human	+++	+++
Dog	++	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

Immunofluorescence: 8 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)

www.invitrogen.com

Invitrogen Corporation • 542 Flynn Rd • Camarillo • CA 93012 • Tel: 800.955.6288 • E-mail: techsupport@invitrogen.com

PI402600

(Rev 10/08) DCC-08-1089

Important Licensing Information - These products may be covered by one or more Limited Use Label Licenses (see the Invitrogen Catalog or our website, www.invitrogen.com). By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.

BACKGROUND

Tight junctions act as both the barrier (or gate) and the fence between neighboring cells. The barrier function of tight junctions regulates the passage of ions, water, and various macromolecules through paracellular spaces. The fence function maintains cell polarity, thus, tight junctions work as a fence to prevent intermixing of molecules in the apical membrane with those in the lateral membrane. Tight junctions are comprised of the membrane proteins occludin, claudins, and JAMs. Claudins are responsible for the formation of tight junction strands and are connected with the actin cytoskeleton by ZO-1.¹

Claudin-8 is a tight junction protein expressed in several distal nephron segments, suggesting that it may have a role as a paracellular cation barrier protein.²⁻⁴ Claudin-8 is found in the inner ear and the umbrella cell tight junctions in the bladder epithelium.⁵⁻⁶

REFERENCES

1. Sawada N, et al. *Med Electron Microsc* 36(3):147-156, 2003.
2. Kiuchi-Saishin Y, et al. *J Am Soc Nephrol* 13: 875-886, 2002.
3. Imai M. *Am J Physiol* 232:F201-209, 1977.
4. Li W Y and Huey CL. *Am J Physiol Renal Physiol* 286:F1063-1071, 2004.
5. Acharya P, et al. *Am J Physiol Renal Physiol* 287:F305-318, 2004.
6. Kitajiri SI, et al. *Hear Res* 187:25-34, 2004.

RELATED PRODUCTS

Product	Conjugate	Cat. No.
Protein A	Sepharose [®] 4B	10-1041
rec-Protein G	Sepharose [®] 4B	10-1241

Conjugate	ZyMAX[™] Goat x Rabbit IgG (H+L)	ZyMAX[™] Goat x Mouse IgG (H+L)
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

Zymed[®] and ZyMAX[™] are trademarks of Zymed Laboratories Inc. Cy[™] and Sepharose[®] are trademarks of Amersham Biosciences Ltd.

For Research Use Only

www.invitrogen.com

Invitrogen Corporation • 542 Flynn Rd • Camarillo • CA 93012 • Tel: 800.955.6288 • E-mail: techsupport@invitrogen.com

PI402600

(Rev 10/08) DCC-08-1089

Important Licensing Information - These products may be covered by one or more Limited Use Label Licenses (see the Invitrogen Catalog or our website, www.invitrogen.com). By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.