Qty: 100 µg/200 µl

Mouse anti-Connexin 32

Catalog No. 35-8900

Lot No.

Mouse anti-Connexin 32

FORM
This monoclonal antibody is supplied as a 200 µl aliquot at a concentration of 0.5 mg/ml in PBS, pH 7.4, containing 0.1% sodium azide. This antibody is highly purified from mouse ascites by protein A chromatography.

CLONE: 5F9A9 **ISOTYPE:** Mouse IgG_{2a}

IMMUNOGEN
Synthetic peptide derived from the C-terminus of mouse Connexin 32.

SPECIFICITY
This antibody reacts with both the monomer and dimer forms of Connexin 32 (molecular weights of ~32 kDa and 51 kDa).

REACTIVITY
Reactivity is confirmed with brain and liver from rat and mouse. Based on sequence homology, this antibody is expected to react with human Connexin 32. This antibody is recommended over Invitrogen Cat. no. 13-8200 for staining of frozen brain sections.

Sample	Immunohisto-chemistry (frozen)	Immuno-fluorescence	Western Blotting
Human	ND	ND	ND
Mouse	+++	+++	+++
Rat	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.

Immunofluorescence: 10 µg/ml
Western Blotting: 1-3 µg/ml
Immunohistochemistry: 10 µg/ml

Note: Please contact Invitrogen Technical Service at 800-874-4494 (US only) or 650-871-4494 for more information regarding fixation conditions in immunofluorescence assays.

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

Gap junctions are transmembrane channels that serve to directly link neighboring cells by mediating the exchange of low-molecular weight metabolites, ions, and second messengers. Gap junctions are formed by the interaction of connexons or hemichannels on adjacent cells. The connexon itself is composed of a hexameric assembly of proteins referred to as connexins. Connexins are highly homologous proteins encoded by a multigene family. The connexins exhibit similar structural features which include a cytoplasmic amino terminal region, four transmembrane domains, two extracellular loops, and a carboxy-terminal cytoplasmic tail of varying length[1,2] Modulation of gap junction communication can be achieved by multiple mechanisms and can occur very rapidly or over a period of several hours. These mechanisms include alterations in transcription, translation, stability, posttranslational processing (especially phosphorylation), gating, and insertion or removal from the plasma membrane[3]. Interestingly, reduction or alterations in the levels or types of connexin expressed in a given cell type has been found to correlate with tumor progression and metastasis[3,4].

REFERENCES

1. Beyer, E., et al; *Cell. Biol.* 105:2621-2629 (1987).
2. Fishman, G.I., et al; *J. Cell. Biol.*. 111:589-598 (1990).
3. Crow, D.S., et al; *Mol. Cell. Biol*. 10:1754-1763 (1990).
4. Wilgenbus, et al; *Int. J. Cancer* 51:522-529 (1992).

RELATED PRODUCTS

Product	*Clone/PAD**	*Cat. No.*
Mouse anti-Cx26	CX-1E8	33-5800
Rabbit anti-Cx-26	UM214	51-2800
Rabbit anti-Cx26	Z-Z8	71-0500
Mouse anti-Cx26	CX-12H10	13-8100
Rabbit anti-Cx29	ZMD.81	34-4200
Mouse anti-Cx30	CX30-8E8	33-2500
Rabbit anti-Cx30	Z-PP9	71-2200
Mouse anti-Cx32	CX-2C2	13-8200
Rabbit anti-Cx32	Z-AA6	71-0600
Rabbit anti-Cx36	CY44	51-6300
Mouse anti-Cx43	CX-1B1	13-8300
Rabbit anti-Cx43	Z-JB1	71-0700
Mouse anti-Cx43	3D8A5	35-5000
Mouse anti-Cx50	C6	33-4300

For Cadherins, Claudins, Occludin, ZO-1, ZO-2 and Catenins: see www.Invitrogen.com

Protein A	Sepharose® 4B	10-1041
rec-Protein G	Sepharose® 4B	10-1241

*PAD: Polyclonal Antibody Designation

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

For Research Use Only

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