Qty: 100 µg/200 µl

Mouse Anti-Connexin-32

Catalog No. 13-8200

Lot No. See product label

Mouse anti-Connexin-32

FORM
This monclonal antibody is supplied as a 200 µl aliquot at 0.5 mg/ml in phosphate buffered saline, pH 7.4, containing 0.1% sodium azide. The antibody is highly purified from mouse ascites by peptide-specific affinity chromatography.

CLONE: CX-2C2 **ISOTYPE:** Mouse IgG_1-kappa

IMMUNOGEN
Synthetic peptide corresponding to a segment of the cytoplasmic loop of rat Connexin-32[1,3,6].

SPECIFICITY
This antibody is specific for Connexin-32.

REACTIVITY
Human, mouse and rat. Reactivity has been confirmed by Western blot analysis of extracts derived from mouse liver, rat liver, rat primary hepatocytes, and rat spinal cord.

USAGE
The dilutions below are only starting recommendations. Optimal concentrations of this antibody should be determined by the researcher for each specific application.

ELISA:	0.1-1.0 µg/ml
Western Blotting [10, 11]:	1 µg/ml
Immunohistochemistry (frozen sections)[9-11]:	1-2 µg/ml
Immunofluorescence[12]:	5-10 µg/ml

The suitability of this antibody in applications other than those listed above has not been evaluated.

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

BACKGROUND[4,8]
Intracellular communication mediated by gap junctions plays an important role in a variety of cellular processes including: homeostasis, morphogenesis, cell differentiation, and growth control. 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. Comparison of the amino acid sequences of the various connexin family members indicate that the two areas of greatest divergence amongst the connexin family members are the intracellular loop connecting the second and third transmembrane segments and the carboxy-terminal tail[1, 3, 6]. These domains are, therefore, thought to mediate connexin-type specific properties including: phosphorylation, responses to gating stimuli, as well as assembly and membrane turnover. Modulation of gap junctional 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, postranslational processing (especially phosphorylation), gating, and insertion or removal from the plasma membrane. 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[5].

(cont'd)

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RELATED PRODUCTS

Product	***Conjugate***	***Cat. No.***
Mouse anti-Connexin 43	Purified	13-8300
Rabbit anti-Connexin 43	Purified	71-0700
Rabbit anti-Connexin 26	Purified	51-2800
Mouse anti-Connexin 26	Purified	33-5800
Rabbit anti-Connexin 26	Purified	71-0500
Mouse anti-Connexin 26	Purified	13-8100
Rabbit anti-Connexin 30	Purified	71-2200
Mouse anti-Connexin 30	Purified	33-2500
Rabbit anti-Connexin 32	Purified	71-0600
Mouse anti-Connexin 32	Purified	13-8200
Rabbit anti-Connexin 36	Purified	51-6300

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

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