Revision 1

Store at -20C

#52559

Phospho-Connexin 43 (Ser368) (D6W8P) Rabbit mAb

Cell Signaling TECHNOLOGY®

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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, IP	H M R	Endogenous	42, 44, 46	Rabbit IgG	#P17302	2697

Product Usage Information

Application	Dilution
Western Blotting	1:1000
Immunoprecipitation	1:50

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at –20°C. Do not aliquot the antibody.

Specificity/Sensitivity

Phospho-Connexin 43 (Ser368) (D6W8P) Rabbit mAb recognizes endogenous levels of connexin 43 protein only when phosphorylated at Ser368.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Ser368 of human connexin 43 protein.

Background

Connexin 43 (Cx43) is a member of the large family of gap junction proteins. Connexins assemble as a hexamer and are transported to the plasma membrane to create a hemichannel that can associate with hemichannels on nearby cells to create cell-to-cell channels. Clusters of these channels assemble to make gap junctions. Gap junction communication is important in development and regulation of cell growth. Phosphorylation of Cx43 is important in regulating assembly and function of gap junctions (1,2). Ser368 of Cx43 is phosphorylated by protein kinase C (PKC) after activation by phorbol esters, which decreases cell-to-cell communication (3). Src can interact with and phosphorylate Cx43 to alter gap junction communication (4,5).

Background References

1. Musil, L.S. et al. (1990) *J Cell Biol* 111, 2077-88.
2. Musil, L.S. and Goodenough, D.A. (1991) *J Cell Biol* 115, 1357-74.
3. Lampe, P.D. et al. (2000) *J Cell Biol* 149, 1503-12.
4. Giepmans, B.N. et al. (2001) *J Biol Chem* 276, 8544-9.
5. Lin, R. et al. (2001) *J Cell Biol* 154, 815-27.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting **IP:** Immunoprecipitation

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat

Trademarks and Patents

Limited Uses

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