

Technical Data Sheet

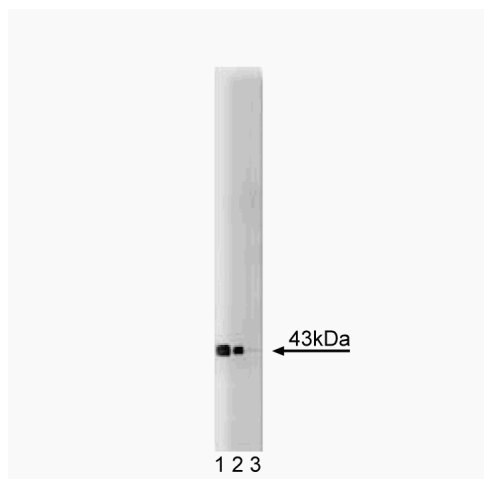
Purified Mouse Anti-Connexin-43**Product Information**

Material Number:	610061
Size:	50 µg
Concentration:	250 µg/ml
Clone:	2/Connexin-43
Immunogen:	Rat Connexin-43 aa. 252-270
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Rat Tested in Development: Chicken, Dog, Human, Mouse
Target MW:	43 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

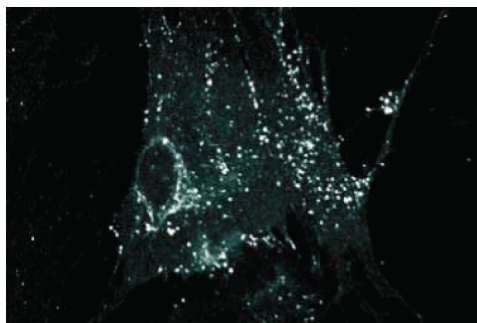
Description

Gap junctions are intercellular protein pores. They enable cell-to-cell communication by allowing passage of ions and other small molecules. The subunits of gap junction channels are assembled from a family of proteins called connexins. Individual connexin molecules join to make hexameric hemichannels termed connexons; these structures dock to connexons on neighboring cells, forming gap junction pores. Connexin-43 is a member of the connexin family possessing four transmembrane regions, with cytoplasmic amino and carboxyl terminals. It undergoes rapid turnover in the cell and its monomers may reside in the ER/Golgi network, forming a reservoir available for assembly upon degradation of existing connexin-43 channels. In addition, it is believed that phosphorylation of connexin-43 plays a regulatory role both in the assembly of connexons and in gating activity at the gap junction.

This antibody is routinely tested by western blot analysis. Other applications were tested at BD Biosciences Pharmingen during antibody development only or reported in the literature.



Western blot analysis of Connexin-43 on a rat cerebrum lysate. Lane 1: 1:250, lane 2: 1:500, lane 3: 1:1000 dilution of the anti-Connexin-43 antibody.



Immunofluorescence staining on WI38 cells (human lung).

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Store undiluted at -20° C.

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Application Notes

Application

Western blot	Routinely Tested
Immunofluorescence	Tested During Development
Immunoprecipitation	Not Recommended
Immunohistochemistry-formalin (antigen retrieval required)	Not Recommended

Suggested Companion Products

Catalog Number	Name	Size	Clone
611463	Rat Cerebrum Lysate	500 µg	(none)
554002	HRP Goat Anti-Mouse Igs	1.0 ml	(none)
554001	FITC Goat Anti-Mouse Igs	0.5 mg	Polyclonal

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharming/en/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

Giepmans BN, Hengeveld T, Postma FR, Moolenaar WH. Interaction of c-Src with gap junction protein connexin-43. Role in the regulation of cell-cell communication. *J Biol Chem.* 2001; 276(11):8544-8549.(Biology: Immunoprecipitation, Western blot)

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Loo LW, Berestecky JM, Kanemitsu MY, Lau AF. pp60src-mediated phosphorylation of connexin 43, a gap junction protein. *J Biol Chem.* 1995; 270(21):12751-12761.(Biology)

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