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Datasheet for 612-401-D22

Connexin 43 Antibody

Overview

Description:	Anti-Connexin 43 (RABBIT) Antibody - 612-401-D22
Item No.:	612-401-D22
Size:	100 µL
Applications:	WB
Reactivity:	Rat
Host Species:	Rabbit

Product Details

Background:	Connexin 43 Antibody detects connexin which is thought to play a key role in development and may also be involved in epilepsy. Connexin 43 antibody recognizes Connexin 43 which forms gap-junctional channels and regulates the permeability of these gap junctions to small organic molecules. Permeability of connexin43 is known to be regulated by phosphorylation at er368 by protein kinase C. Phosphorylation of Ser368 by PKC induces a conformational change of connexin43 that results in a decrease in gap junction permeability. Anti-Connexin 43 Antibody is ideal for investigators involved in Neuroscience and Cell Signaling.
Synonyms:	Gap junction alpha-1 protein, Gap junction 43 kDa heart protein, CX43, Connexin-43
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	Gja1
Reactivity:	Rat
Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-Connexin 43 Antibody was produced in rabbit by repeated immunizations with synthetic peptide corresponding to amino acid residues from the C-terminal region conjugated to KLH.

Purity/Specificity:	Anti-Connexin 43 antibody is directed against rat Connexin 43. Anti-Connexin 43 antibody was affinity purified from monospecific antiserum by immunoaffinity purification. Anti-Connexin 43 antibody recognizes Connexin 43 from rat sources. Cross reactivity with Connexin 43 from other species has not been determined. However, reactivity is also expected from the following species based on 100% sequence homology: chicken, canine, finch, human, mouse non-human primate, sheep, Xenopus, zebra fish.
Relevant Links:	• UniProtKB - P08050 • GeneID - 24392 • NCBI - AAA41000.1

Application Details

Tested Applications:	WB
Application Note:	Anti-Connexin 43 Antibody has been tested by western blot and is suitable for use in ELISA. Specific conditions for reactivity should be optimized by the end user. Expect a band of approximately 43 kDa in size corresponding to connexin 43 protein in the appropriate cell lysate or extract.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000
WB:	1:1000

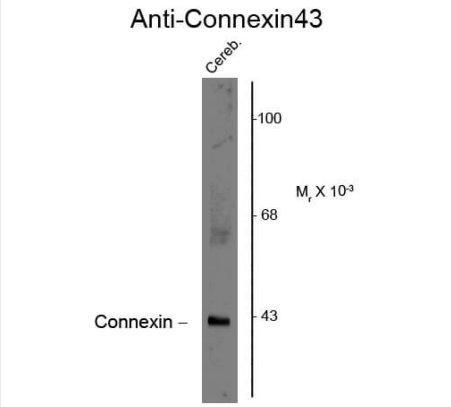
Formulation

Physical State:	Liquid
Concentration:	titrated reagent Sufficient to run approximately 10 miniblots
Buffer:	0.01 M HEPES, 0.15 M Sodium Chloride, pH 7.5
Stabilizer:	0.1 mg/ml Bovine Serum Albumin (BSA) - IgG and Protease free, 50% (v/v) Glycerol

Shipping & Handling

Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C prior to opening. This product is stable at 4° C as an undiluted liquid. For extended storage, aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Western blot of rat cerebellar lysate showing specific immunolabeling of the ~43k connexin43 protein.

Western Blot

Western Blot of Anti-Connexin 43 (Rabbit) Antibody. Lane 1: rat cerebellar lysate. Lane 2: none. Load: 10 µg per lane. Primary antibody: Connexin 43 antibody at 1:400 for overnight at 4°C. Secondary antibody: IRDye800™ rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: ~43kDa/~43kDa for connexin43 protein. Other band(s): none.

Disclaimer

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