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Datasheet for 600-401-CC5

JPH2 Antibody

Overview

Description:	Anti-JPH2 (RABBIT) Antibody - 600-401-CC5
Item No.:	600-401-CC5
Size:	100 µg
Applications:	ELISA, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	Junctional complexes between the plasma membrane (PM) and endoplasmic/sarcoplasmic reticulum (ER/SR) are a common feature of all excitable cell types and mediate cross talk between cell surface and intracellular ion channels. Junctophilins (JPs) are important components of the junctional complexes. JPs are composed of a carboxy-terminal hydrophobic segment spanning the ER/SR membrane and a remaining cytoplasmic domain that shows specific affinity for the PM. Four JPs have been identified as tissue-specific subtypes derived from different genes: JPH1 is expressed in skeletal muscle, JPH2 is detected throughout all muscle cell types, and JPH3 and JPH4 are predominantly expressed in the brain and contribute to the subsurface cistern formation in neurons. JPH2-null mice died of embryonic cardiac arrest and human patients with mutations in the JPH2 gene showed hypertrophic cardiomyopathy, demonstrating the importance of this protein. Multiple isoforms of JPH2 are known to exist.
Synonyms:	JPH2 Antibody, JP4, JPHL1, KIAA1831, Junctophilin-4, Junctophilin-like 1 protein, JP-4
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	JPH2
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-JPH2 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 14 amino acid synthetic peptide near the C-terminus of human JPH2.
Purity/Specificity:	Anti-JPH2 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with JPH2 from other sources has not been determined.
Relevant Links:	• UniProtKB - Q9BR39 • GeneID - 84502 • NCBI - NP_065166

Application Details

Tested Applications:	ELISA, WB
Application Note:	Anti-JPH2 Antibody has been tested for use in ELISA and Western Blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 74 kDa in Western Blots of specific cell lysates and tissues.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:20,000
WB:	2 µg/mL

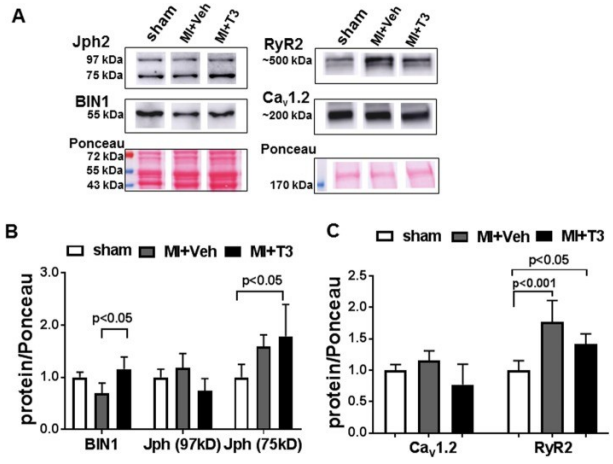
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

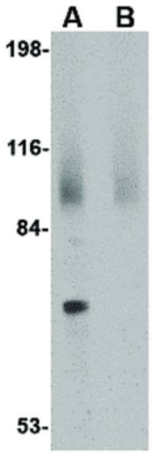
Shipping & Handling

Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Western Blot
Immunoblot analysis of T-tubule and SR proteins. a Representative immunoblots of microsomal fractions from LV tissues of each study group that were probed with anti-BIN1, Jph2, Cav1.2 and RyR2 antibodies. Observed molecular weights (kDa) of each protein are indicated. Ponceau red staining of the immunoblots are shown with molecular weight markers. b,c Bar graphs show the quantitation of the luminescence intensity of the indicated protein bands, normalized to Ponceau red staining and expressed relative to the mean sham values. Values are mean ± SD for n = 4–6 hearts/group. Statistical analysis using one-way ANOVA with post-hoc Tukey's multiple group comparisons; p-values are indicated.
Fig 6.
PMID: 31810440



Western Blot
Western Blot of JPH2 antibody. Lane A: 293 cell lysate in the absence of blocking peptide. Lane B: 293 cell lysate in the presence of blocking peptide. Load: 35 µg per lane. Primary Antibody: Anti-JPH2 at 2 µg/mL. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 74.2 kDa, ~74 kDa for JPH2.

References

- An S et al. Adverse transverse-tubule remodeling in a rat model of heart failure is attenuated with low-dose triiodothyronine treatment. *Mol Med.* (2019)

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