DATASHEET

Cav1.2 Rabbit Polyclonal Antibody

CAT. NO. APA08359

KEY FEATURES

Target	Cav1.2	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat, Rabbit	Clonality	Polyclonal
Applications	WB, IF/ICC	Conjugation	Unconjugated
Form / Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.	Storage	at-20°C

BACKGROUND

Pore-forming, alpha-1C subunit of the voltage-gated calcium channel that gives rise to L-type calcium currents . Mediates influx of calcium ions into the cytoplasm, and thereby triggers calcium release from the sarcoplasm . Plays an important role in excitation-contraction coupling in the heart. Required for normal heart development and normal regulation of heart rhythm . Required for normal contraction of smooth muscle cells in blood vessels and in the intestine. Essential for normal blood pressure regulation via its role in the contraction of arterial smooth muscle cells . Long-lasting (L-type) calcium channels belong to the 'high-voltage activated' (HVA) group (Probable).

APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IF/ICC	1:50 - 1:200

*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

PRODUCT OVERVIEW

Description	Rabbit polyclonal antibody to Cav1.2
Specificity	Recognizes endogenous levels of Cav1.2 protein.
Antibody Type	Primary antibody
Immunogen	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Cav1.2. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 248 kD; Observed: 190 kD
Form/Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	CACH2; CACN2; CACNL1A1; CCHL1A1; Voltage-dependent L-type calcium channel subunit alpha-1C; Calcium channel, L type, alpha-1 polypeptide, isoform 1, cardiac muscle; Voltage-gated calcium channel subunit alpha Cav1.2
Gene Symbol	CACNA1C
Entrez Gene	775(Human); 12288(Mouse); 24239(Rat)
SwissProt	Q13936(Human); Q01815(Mouse); P22002(Rat)

*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact info@arexbio.com or your local distributor.

*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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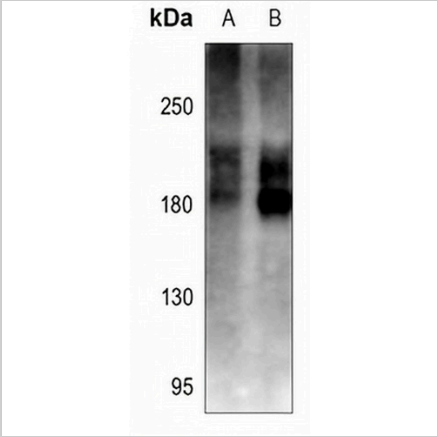
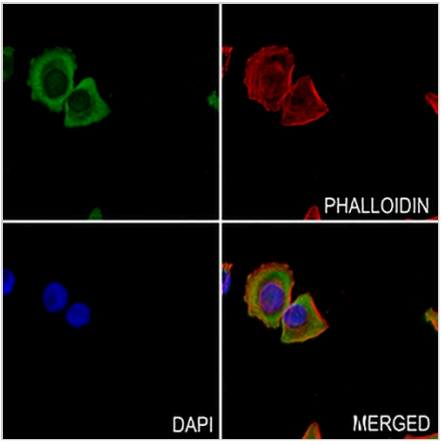
DATA



Western blot analysis of Cav1.2 expression in mouse brain (A), rat brain (B) whole cell lysates. (Predicted band size: 248 kD; Observed band size: 190 kD)



Immunofluorescent analysis of Cav1.2 staining in MCF7 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AREX® Fluor 488 -conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AREX® Fluor 594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

STORAGE

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

NOTE

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.