

DATASHEET

Ryanodine Receptor 2 Rabbit Polyclonal Antibody

CAT. NO. APA09775

KEY FEATURES

Target	Ryanodine Receptor 2	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat, Rabbit	Clonality	Polyclonal
Applications	WB, IHC, 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

Cytosolic calcium-activated calcium channel that mediates the release of Ca(2+) from the sarcoplasmic reticulum into the cytosol and thereby plays a key role in triggering cardiac muscle contraction. Aberrant channel activation can lead to cardiac arrhythmia. In cardiac myocytes, calcium release is triggered by increased Ca(2+) cytosolic levels due to activation of the L-type calcium channel CACNA1C. The calcium channel activity is modulated by formation of heterotetramers with RYR3. Required for cellular calcium ion homeostasis. Required for embryonic heart development.

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
IHC	1:50 - 1:100
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 Ryanodine Receptor 2
Specificity	Recognizes endogenous levels of Ryanodine Receptor 2 protein.
Antibody Type	Primary antibody
Immunogen	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Ryanodine Receptor 2. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 564 kD; Observed: 564 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	Ryanodine receptor 2; RYR-2; RyR2; hRYR-2; Cardiac muscle ryanodine receptor; Cardiac muscle ryanodine receptor-calcium release channel; Type 2 ryanodine receptor
Gene Symbol	RYR2
Entrez Gene	6262(Human); 20191(Mouse); 689560(Rat)
SwissProt	Q92736(Human); E9Q401(Mouse); BOLPN4(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.

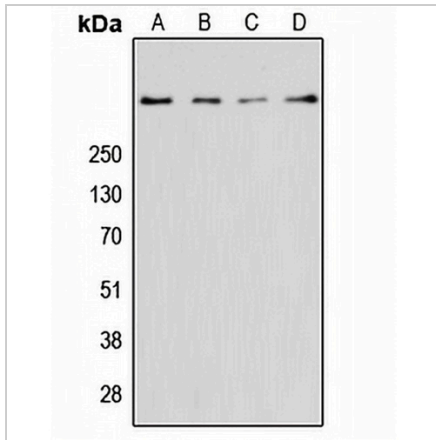
*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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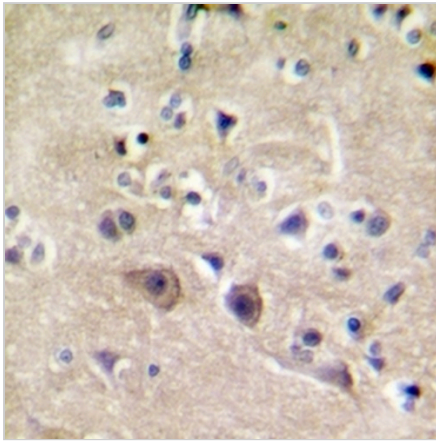
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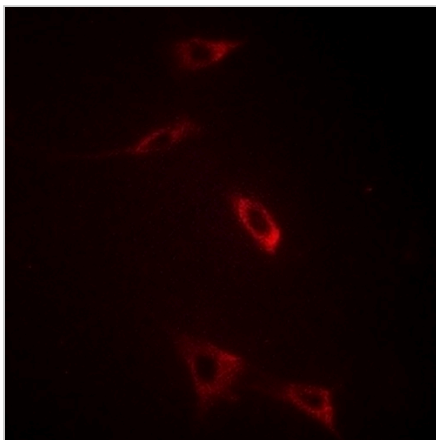
DATA



Western blot analysis of Ryanodine Receptor 2 expression in PC3 (A), MCF7 (B), NIH3T3 (C), mouse brain (D) whole cell lysates. (Predicted band size: 564 kD; Observed band size: 564 kD)



Immunohistochemical analysis of Ryanodine Receptor 2 staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of Ryanodine Receptor 2 staining in NIH-3T3 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 humidified chamber. Cells were washed with PBST and incubated with a AREX® Fluor 594-conjugated secondary antibody (red) in PBS at room temperature in the dark.

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.