


Product datasheet

Anti-Ryanodine receptor 2/RYR-2 antibody - N-terminal ab196355

3 References

Overview

Product name	Anti-Ryanodine receptor 2/RYR-2 antibody - N-terminal
Description	Rabbit polyclonal to Ryanodine receptor 2/RYR-2 - N-terminal
Host species	Rabbit
Tested applications	Suitable for: WB, ICC/IF
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Rat, Rabbit 
Immunogen	Synthetic peptide within Human Ryanodine receptor 2/RYR-2 (N terminal). The exact sequence is proprietary. Database link: Q92736
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	Constituents: 1.21% Tris, 0.75% Glycine
Purity	Protein A purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab196355 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.

Target

Function	Calcium channel that mediates the release of Ca(2+) from the sarcoplasmic reticulum into the cytoplasm 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+) 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.
Tissue specificity	Detected in heart muscle (at protein level). Heart muscle, brain (cerebellum and hippocampus) and placenta.
Involvement in disease	Familial arrhythmogenic right ventricular dysplasia 2 Ventricular tachycardia, catecholaminergic polymorphic 1, with or without atrial dysfunction and/or dilated cardiomyopathy
Sequence similarities	Belongs to the ryanodine receptor (TC 1.A.3.1) family. RYR2 subfamily. Contains 3 B30.2/SPRY domains. Contains 5 MIR domains.
Developmental stage	Expressed in myometrium during pregnancy.
Domain	The calcium release channel activity resides in the C-terminal region while the remaining part of the protein resides in the cytoplasm.
Post-translational modifications	Channel activity is modulated by phosphorylation. Phosphorylation at Ser-2808 and Ser-2814 increases the open probability of the calcium channel. Phosphorylation is increased in failing heart, leading to calcium leaks and increased cytoplasmic Ca(2+) levels. Phosphorylation at Ser-2031 by PKA enhances the response to lumenal calcium.
Cellular localization	Sarcoplasmic reticulum membrane. Membrane. The number of predicted transmembrane domains varies between orthologs, but both N-terminus and C-terminus seem to be cytoplasmic.

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