

Anti-Ryanodine Receptor antibody [EPR21796] - BSA and Azide free ab231086

重组 RabMAb

10 图像

概述

产品名称	Anti-Ryanodine Receptor抗体[EPR21796] - BSA and Azide free
描述	兔单克隆抗体[EPR21796] to Ryanodine Receptor - BSA and Azide free
宿主	Rabbit
经测试应用	适用于: ICC/IF, IHC-P, WB, IHC-Fr
种属反应性	与反应: Mouse, Rat, Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
阳性对照	WB: Human skeletal muscle tissue lysate; mouse skeletal muscle tissue lysate; rat skeletal muscle tissue lysate. IHC-P: Mouse skeletal muscle and cerebellum tissue; rat skeletal muscle and cerebellum tissue. IHC-Fr: Mouse skeletal muscle and cerebellum tissue; rat skeletal muscle and cerebellum tissue. ICC/IF: C2C12 cells.
常规说明	<p>ab231086 is the carrier-free version of ab219798.</p> <p>Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit</p>

monoclonal antibodies. For details on our patents, please refer to [RabMAb® patents](#).

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C. Do Not Freeze.
存储溶液	pH: 7.2 Constituent: PBS
无载体	是
纯度	Protein A purified
克隆	单克隆
克隆编号	EPR21796
同种型	IgG

应用

The Abpromise guarantee **Abpromise™** 承诺保证使用 ab231086 于以下的经测试应用

“应用说明”部分 下显示的仅为推荐的起始稀释度；实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
ICC/IF		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. IHC is not recommended in human due to non-specific staining.
WB		Use at an assay dependent concentration. Predicted molecular weight: 565 kDa.
IHC-Fr		Use at an assay dependent concentration. Perform heat-mediated antigen retrieval by using ab94681 (Tris/EDTA buffer, pH9.0). IHC is not recommended in human due to non-specific staining.

靶标

功能	Calcium channel that mediates the release of Ca(2+) from the sarcoplasmic reticulum into the cytoplasm and thereby plays a key role in triggering muscle contraction following depolarization of T-tubules. Repeated very high-level exercise increases the open probability of the channel and leads to Ca(2+) leaking into the cytoplasm. Can also mediate the release of Ca(2+) from intracellular stores in neurons, and may thereby promote prolonged Ca(2+) signaling in the brain. Required for normal embryonic development of muscle fibers and skeletal muscle. Required for normal heart morphogenesis, skin development and ossification during embryogenesis.
组织特异性	Skeletal muscle and brain (cerebellum and hippocampus).

疾病相关

Malignant hyperthermia 1
Central core disease of muscle
Multiminicore disease with external ophthalmoplegia
Myopathy, congenital, with fiber-type disproportion
Defects in RYR1 may be a cause of Samaritan myopathy, a congenital myopathy with benign course. Patients display severe hypotonia and respiratory distress at birth. Unlike other congenital myopathies, the health status constantly improves and patients are minimally affected at adulthood.

序列相似性

Belongs to the ryanodine receptor (TC 1.A.3.1) family. RYR1 subfamily.
Contains 3 B30.2/SPRY domains.
Contains 5 MIR domains.

结构域

The calcium release channel activity resides in the C-terminal region while the remaining part of the protein constitutes the 'foot' structure spanning the junctional gap between the sarcoplasmic reticulum (SR) and the T-tubule.

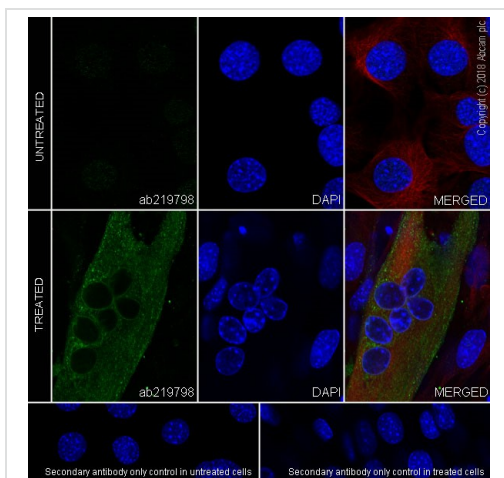
翻译后修饰

Channel activity is modulated by phosphorylation. Phosphorylation at Ser-2843 may increase channel activity. Repeated very high-level exercise increases phosphorylation at Ser-2843. Activated by reversible S-nitrosylation. Repeated very high-level exercise increases S-nitrosylation.

细胞定位

Sarcoplasmic reticulum membrane. Membrane. The number of predicted transmembrane domains varies between orthologs, but both N-terminus and C-terminus seem to be cytoplasmic.

图片

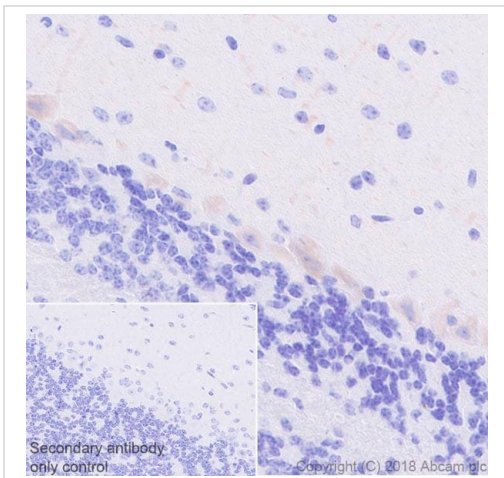


Immunocytochemistry/ Immunofluorescence - Anti-Ryanodine Receptor antibody [EPR21796] - BSA and Azide free (ab231086)

Immunohistochemical analysis of C2C12 (mouse muscle myoblast) cells labeling Ryanodine Receptor (green) with **ab219798** at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor[®] 488) (**ab150077**) at 1/1000 dilution. Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% TritonX-100. Confocal image showing cytoplasmic staining in differentiated C2C12 cells. Confluent C2C12 cells were grown for 8 days to differentiate into myotube in a complete culture medium containing 10% FBS, following the ATCC protocol for myotube formation. The nuclear counter stain is DAPI (blue).

ab195889, Anti-Alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor[®] 594) at 1/200 was used as counterstain.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab219798**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Ryanodine Receptor antibody [EPR21796] - BSA and Azide free (ab231086)

Immunohistochemical analysis of paraffin-embedded mouse cerebellum tissue labeling Ryanodine Receptor with [ab219798](#) at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Cytoplasmic staining in Purkinje cells of mouse cerebellum (PMID 18313230) is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat-mediated antigen retrieval using [ab93684](#) (Tris/EDTA buffer, pH 9.0).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab219798](#)).



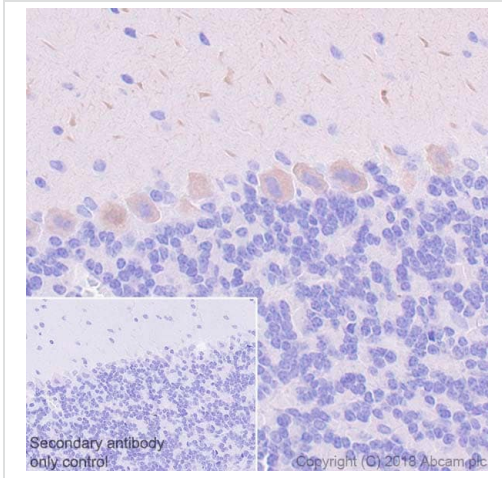
Immunohistochemistry (Frozen sections) - Anti-Ryanodine Receptor antibody [EPR21796] - BSA and Azide free (ab231086)

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen sectioned mouse skeletal muscle tissue labeling Ryanodine Receptor (green) with [ab219798](#) at 1/30 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor[®] 488) ([ab150077](#)) at 1/1000 dilution. Positive staining in mouse skeletal muscle cells (PMID: 21454501) is observed. The nuclear counter stain is DAPI (blue).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor[®] 488) ([ab150077](#)) at 1/1000 dilution.

Perform heat-mediated antigen retrieval by using [ab94681](#) (Tris/EDTA buffer, pH9.0).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab219798](#)).



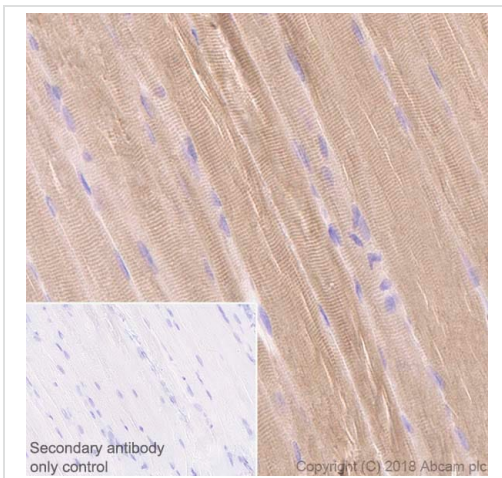
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Immunohistochemical analysis of paraffin-embedded rat cerebellum tissue labeling Ryanodine Receptor with **ab219798** at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Cytoplasmic staining in Purkinje cells of rat cerebellum (PMID 18313230) is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

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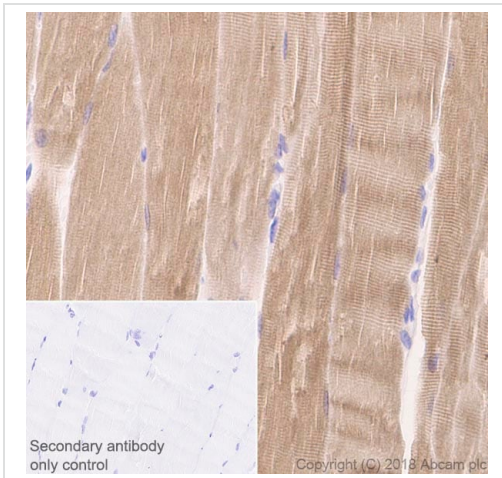
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Immunohistochemical analysis of paraffin-embedded rat skeletal muscle tissue labeling Ryanodine Receptor with **ab219798** at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Cytoplasmic staining in rat skeletal muscle (PMID: 26109061) is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

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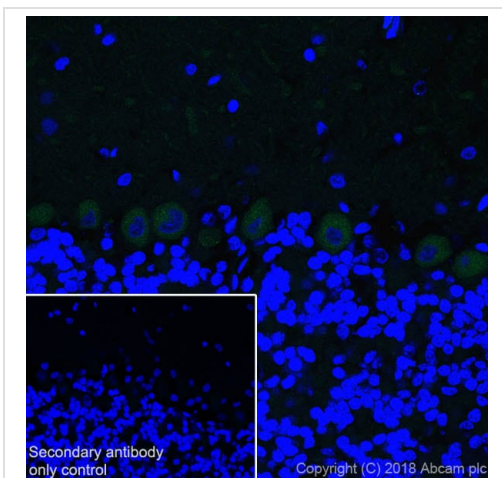
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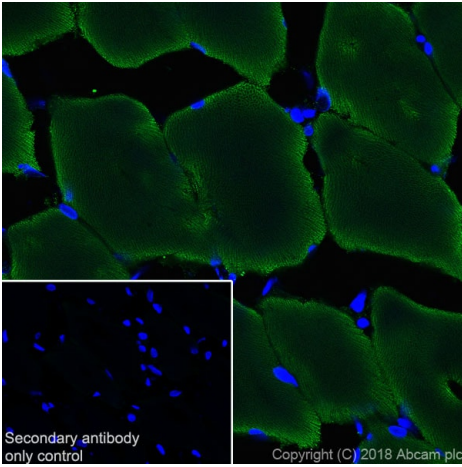
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Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen sectioned rat cerebellum tissue labeling Ryanodine Receptor (green) with **ab219798** at 1/30 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor[®] 488) (**ab150077**) at 1/1000 dilution. Positive cytoplasmic staining in Purkinje cells, negative staining in cells localized in granular layer and molecular layer of rat cerebellum tissue section (PMID: 18313230) is observed. The nuclear counter stain is DAPI (blue).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor[®] 488) (**ab150077**) at 1/1000 dilution.

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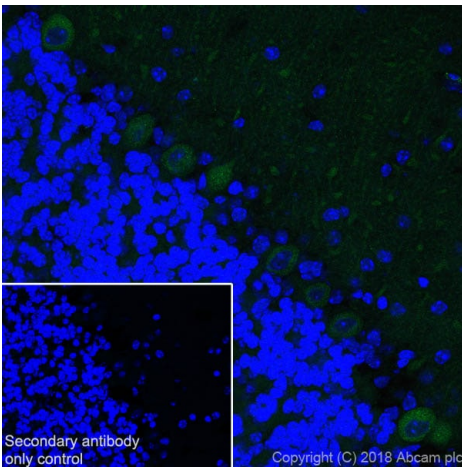
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Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-Ryanodine Receptor antibody [EPR21796] -
BSA and Azide free (ab231086)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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