

# Anti-Calcium channel L type DHPR alpha 2 subunit/CACNA2D1 antibody [EPR23267-8] - BSA and Azide free ab273881

Recombinant **RabMAb**

5 Images

### Overview

<b>Product name</b>	Anti-Calcium channel L type DHPR alpha 2 subunit/CACNA2D1 antibody [EPR23267-8] - BSA and Azide free
<b>Description</b>	Rabbit monoclonal [EPR23267-8] to Calcium channel L type DHPR alpha 2 subunit/CACNA2D1 - BSA and Azide free
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-P <b>Unsuitable for:</b> Flow Cyt, ICC/IF or IP
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat
<b>Immunogen</b>	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	WB: Mouse and rat skeletal muscle, brain and heart tissue lysates; C2C12, C6 and PC-12 whole cell lysates. IHC-P: Rat skeletal muscle, pancreas and cerebrum tissue; Mouse skeletal muscle tissue.
<b>General notes</b>	<p>ab273881 is the carrier-free version of <a href="#">ab253190</a>.</p> <p>Our <b>carrier-free</b> 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 <b>conjugation kits</b> for antibody conjugates that are ready-to-use in as little as 20 minutes with &lt;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<sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> 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"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> </ul>

- Long-term security of supply
  - Animal-free production
- For more information [see here](#).

Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to [RabMAb<sup>®</sup> patents](#).

## Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C. Do Not Freeze.
<b>Storage buffer</b>	pH: 7.2 Constituent: PBS
<b>Carrier free</b>	Yes
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR23267-8
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our [Abpromise guarantee](#) covers the use of ab273881 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
<b>WB</b>		Use at an assay dependent concentration. Detects a band of approximately 150 kDa (predicted molecular weight: 125 kDa).
<b>IHC-P</b>		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

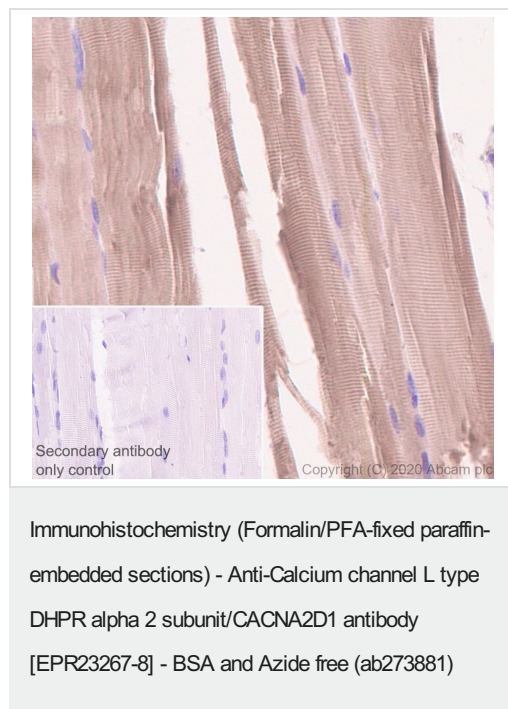
**Application notes** Is unsuitable for Flow Cyt, ICC/IF or IP.

## Target

<b>Function</b>	The alpha-2/delta subunit of voltage-dependent calcium channels regulates calcium current density and activation/inactivation kinetics of the calcium channel. Plays an important role in excitation-contraction coupling.
<b>Tissue specificity</b>	Isoform 1 is expressed in skeletal muscle. Isoform 2 is expressed in the central nervous system. Isoform 2, isoform 4 and isoform 5 are expressed in neuroblastoma cells. Isoform 3, isoform 4 and isoform 5 are expressed in the aorta.
<b>Sequence similarities</b>	Belongs to the calcium channel subunit alpha-2/delta family. Contains 1 cache domain. Contains 1 VWFA domain.

<b>Domain</b>	The MIDAS-like motif in the VWFA domain binds divalent metal cations and is required to promote trafficking of the alpha-1 (CACNA1) subunit to the plasma membrane by an integrin-like switch.
<b>Post-translational modifications</b>	Proteolytically processed into subunits alpha-2-1 and delta-1 that are disulfide-linked.
<b>Cellular localization</b>	Membrane.

## Images

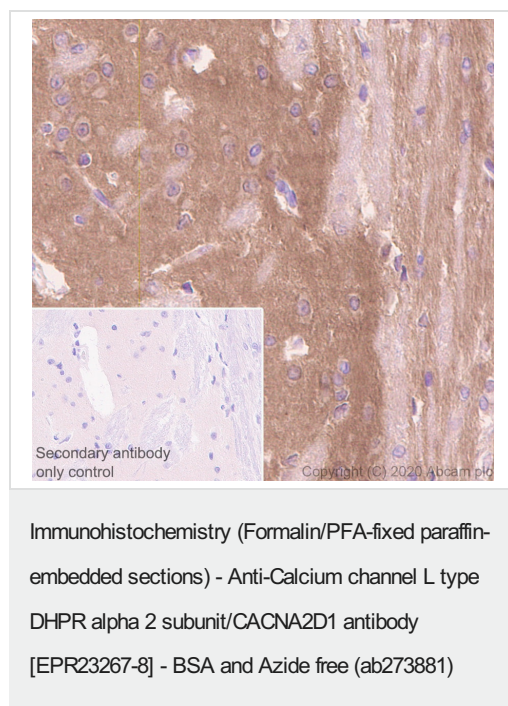


Immunohistochemical analysis of paraffin-embedded mouse skeletal muscle tissue labeling Calcium channel L type DHPR alpha 2 subunit/CACNA2D1 with [ab253190](#) at 1/200 dilution followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Positive staining on mouse skeletal muscle (PMID: 18063658). Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP).

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 ([ab253190](#)).

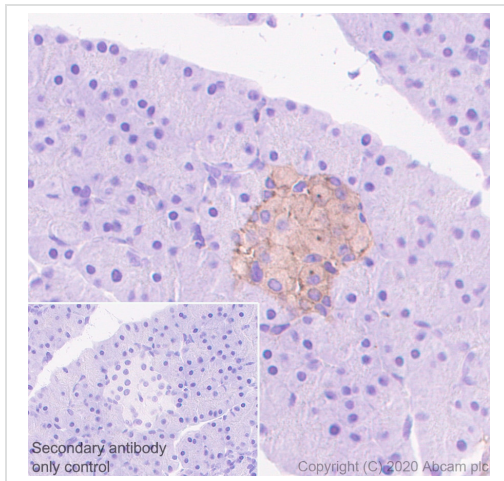


Immunohistochemical analysis of paraffin-embedded rat cerebrum tissue labeling Calcium channel L type DHPR alpha 2 subunit/CACNA2D1 with [ab253190](#) at 1/200 dilution followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Positive staining on rat cerebrum (PMID: 8955374). Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP).

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 ([ab253190](#)).



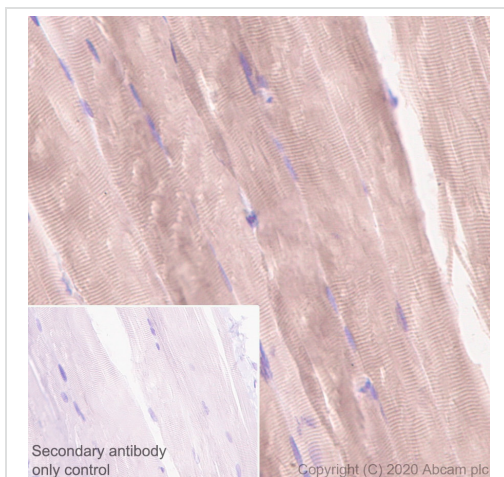
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Calcium channel L type DHPR alpha 2 subunit/CACNA2D1 antibody [EPR23267-8] - BSA and Azide free (ab273881)

Immunohistochemical analysis of paraffin-embedded rat pancreas tissue labeling Calcium channel L type DHPR alpha 2 subunit/CACNA2D1 with [ab253190](#) at 1/200 dilution followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Positive staining on rat pancreatic islet (PMID: 28115397). Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP).

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 ([ab253190](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Calcium channel L type DHPR alpha 2 subunit/CACNA2D1 antibody [EPR23267-8] - BSA and Azide free (ab273881)

Immunohistochemical analysis of paraffin-embedded rat skeletal muscle tissue labeling Calcium channel L type DHPR alpha 2 subunit/CACNA2D1 with [ab253190](#) at 1/200 dilution followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Positive staining on rat skeletal muscle (PMID: 18063658). Counterstained with Hematoxylin.

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

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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-Calcium channel L type DHPR alpha 2 subunit/CACNA2D1 antibody [EPR23267-8] - BSA and Azide free (ab273881)

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

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