abcam

Product datasheet

Anti-Calbindin antibody [EPR22698-236] - BSA and Azide free ab255691



7 Images

Overview

Product name Anti-Calbindin antibody [EPR22698-236] - BSA and Azide free

Description Rabbit monoclonal [EPR22698-236] to Calbindin - BSA and Azide free

Host species Rabbit

Tested applications Suitable for: WB, IHC-P, IHC-Fr, IP

Unsuitable for: Flow Cyt or ICC/IF

Species reactivity Reacts with: Mouse, Rat

Immunogen Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

Positive control IP: Rat brain lysate; mouse brain lysate. IHC-P: Rat cerebellum tissue; mouse cerebellum tissue.

IHC-Fr: Rat cerebellum tissue; mouse cerebellum tissue.

General notes ab255691 is the carrier-free version of ab229915.

> 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.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

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.

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.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

1

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C. Do Not Freeze.

Storage buffer pH: 7.2

Constituent: PBS

Carrier free Yes

Purity Protein A purified

Clonality Monoclonal

Clone number EPR22698-236

Isotype IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab255691 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. Detects a band of approximately 30 kDa (predicted molecular weight: 30 kDa).
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-Fr		Use at an assay dependent concentration. Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).
IP		Use at an assay dependent concentration.

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

Target

Function Buffers cytosolic calcium. May stimulate a membrane Ca(2+)-ATPase and a 3',5'-cyclic

nucleotide phosphodiesterase.

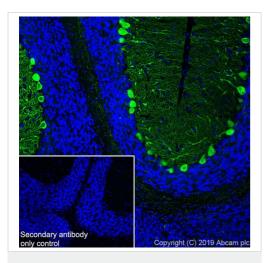
Sequence similarities Belongs to the calbindin family.

Contains 5 EF-hand domains.

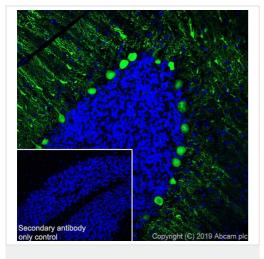
Domain This protein has four functional calcium-binding sites; potential sites II and VI have lost affinity for

calcium.

Images



Immunohistochemistry (Frozen sections) - Anti-Calbindin antibody [EPR22698-236] - BSA and Azide free (ab255691)



Immunohistochemistry (Frozen sections) - Anti-Calbindin antibody [EPR22698-236] - BSA and Azide free (ab255691)

Immunohistochemical analysis of frozen section of 4% PFA-fixed, 0.2% Triton X-100 permeabilized mouse cerebellum tissue labeling Calbindin with ab229915 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor[®] 488) (ab150077) at 1/1000 dilution (green). Positive staining on molecular layer and purkinje cells of mouse cerebellum (PMID: 20130198) 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 lgG H&L (Alexa Fluor® 488) (ab150077) at 1/1000 dilution.

Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).

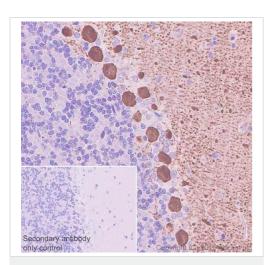
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab229915).

Immunohistochemical analysis of frozen section of 4% PFA-fixed, 0.2% Triton X-100 permeabilized rat cerebellum tissue labeling Calbindin with ab229915 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor 488) (ab150077) at 1/1000 dilution (green). Positive staining on molecular layer and purkinje cells of rat cerebellum (PMID: 20130198) 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 lgG H&L (Alexa Fluor® 488) (ab150077) at 1/1000 dilution.

Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab229915).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Calbindin antibody
[EPR22698-236] - BSA and Azide free (ab255691)

Immunohistochemical analysis of paraffin-embedded rat cerebellum tissue labeling Calbindin with <u>ab229915</u> at 1/4000 dilution, followed by Rabbit specific IHC polymer detection kit HRP/DAB (<u>ab209101</u>). Positive staining on Purkinje cells of rat cerebellum (PMID: 17507571) is observed. Counter stained with hematoxylin.

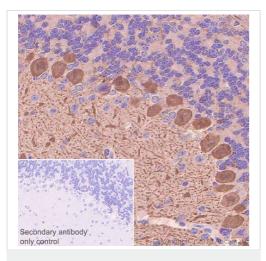
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20mins.

The section was incubated with <u>ab229915</u> for 30 mins at room temperature.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab229915).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Calbindin antibody

[EPR22698-236] - BSA and Azide free (ab255691)

Immunohistochemical analysis of paraffin-embedded mouse cerebellum tissue labeling Calbindin with <u>ab229915</u> at 1/4000 dilution, followed by Rabbit specific IHC polymer detection kit HRP/DAB (<u>ab209101</u>). Strong positive staining on Purkinje cells of mouse cerebellum (PMID: 17507571) is observed. Counter stained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Rabbit specific IHC polymer detection kit HRP/DAB (<u>ab209101</u>).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20mins.

The section was incubated with <u>ab229915</u> for 30 mins at room temperature.

The immunostaining was performed on a Leica Biosystems

BOND® RX instrument

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab229915).

Calbindin was immunoprecipitated from 0.35 mg of mouse brain lysate with <u>ab229915</u> at 1/30 dilution. Western blot was performed from the immunoprecipitate using <u>ab229915</u> at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (<u>ab131366</u>), was used as the secondary antibody at 1/5000 dilution.

Lane 1: Mouse brain lysate 10 µg (Input).

Lane 2: ab229915 IP in mouse brain lysate.

Lane 3: Rabbit monoclonal IgG (<u>ab172730</u>) instead of <u>ab229915</u> in mouse brain lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST. Exposure time: 5 seconds.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab229915).

Calbindin was immunoprecipitated from 0.35 mg of rat brain lysate with <u>ab229915</u> at 1/30 dilution. Western blot was performed from the immunoprecipitate using <u>ab229915</u> at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (<u>ab131366</u>), was used as the secondary antibody at 1/5000 dilution.

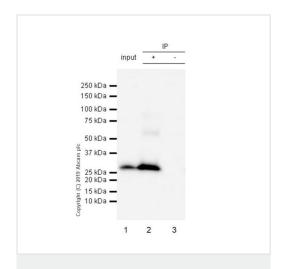
Lane 1: Rat brain lysate 10 µg (Input).

Lane 2: ab229915 IP in rat brain lysate.

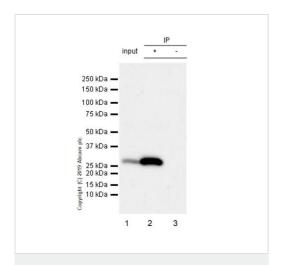
Lane 3: Rabbit monoclonal IgG (<u>ab172730</u>) instead of <u>ab229915</u> in rat brain lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST. Exposure time: 30 seconds.

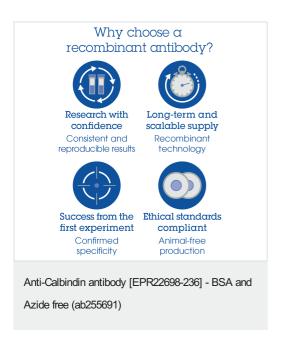
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab229915).



Immunoprecipitation - Anti-Calbindin antibody
[EPR22698-236] - BSA and Azide free (ab255691)



Immunoprecipitation - Anti-Calbindin antibody
[EPR22698-236] - BSA and Azide free (ab255691)



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

Our Abpromise to you: Quality guaranteed and expert technical support

- · Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

· Guarantee only valid for products bought direct from Abcam or one of our authorized distributors