

RABBIT ANTI- Ca_V1.3 (α 1D SUBUNIT) AFFNITY PURIFIED POLYCLONAL ANTIBODY

CATALOG NUMBER: AB5158

LOT NUMBER:

QUANTITY: 200 μL

CONCENTRATION: 0.97 mg/mL (after reconstitution)

SPECIFICITY: Recognizes all forms of α 1D subunit (Ca_v1.3, L-type Voltage Gated Cal²⁺ Channel, Cacna1d)

from the voltage-gated calcium channel. Does not cross react with any other calcium channel

antigens tested so far.

IMMUNOGEN: Purified peptide from amino acids 859-875 of α 1D subunit of rat brain voltage-gated calcium

channel (Accession P27732).

APPLICATIONS: All procedures that are going to receive a full-length protein should be performed at 4 °C, and

the following protease inhibitor mixture should be used: pepstatin A (1 μ g/mL), leupeptin (1 μ g/mL), aprotinin (1 μ g/mL), Pefabloc SC (0.2 mM), benzamidine (0.1 mg/mL), and calpain

inhibitors I and II (8 μg/mL each).

Western blot: 1:200 using ECL on rat brain membranes.

Immunohistochemistry on rat brain sections.

Dilutions should be made using a carrier protein such as BSA (1-3%)

Optimal working dilutions must be determined by the end user.

CONTROL ANTIGEN: Included free of charge with the antibody is XX μg of control antigen (lyophilized powder).

The stock solution of the antigen can be made up using 100 μ L of sterile deionized water. For

negative control, preincubate 1 μg of peptide with 1 μg of antibody for one hour at room

temperature. Optimal concentrations must be determined by the end user.

SPECIES

REACTIVITIES:

Rat and mouse. Other species have not been tested.

FORMAT: Affinity purified immunoglobulin.

PRESENTATION: Lyophilized from phosphate buffered saline, pH 7.4, containing 1% BSA, 5% sucrose as a

stabilizer and 0.05% sodium azide as a preservative. Reconstitute with 200 µL of sterile

deionized water. Centrifuge antibody preparation before use (10,000 xg for 5 min).

STORAGE/HANDLING: Maintain lyophilized material at -20°C for up to 12 months after date of receipt. After

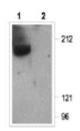
reconstitution maintain at -20°C in undiluted aliquots for up to 6 months. Avoid repeated

freeze/thaw cycles.



SUGGESTED WESTERN BLOT PROTOCOL

- 1. Mix the samples (organ membranes: 50 μg/lane; transfected cells: 500,000 cells/lane) with sample-buffer X 2, and heat 10 min at 70°C.
- 2. 5-50 μL applied to Minigel lane (0.75-1.5 mm width) and run at standard conditions. (60 mA for 2 1.5 mm Minigel gels, 1.4 h). It is suggested that you run 5-15% acrylamide (37.5:1 acrylamide:bisacrysmide) minigel (1.5 mm width) at 30 mA/gel ~1-1.5 hours.
- Transfer in semi-dry system under standard conditions (3 h 100 mA for two minigel gels)
- Stain the transferred bands with Chemicon BLOT-FastStain (Catalog Number 2076).
- Destain with deionized water.
- 6. Block with 5% non-fat milk (Marvel or Carnation) in PBS, and 0.025 % sodium azide, overnight at 2-8°C. The non-fat milk should be dissolved freshly, centrifuged 10,000 rpm for 10 min, and filtered through glass filter (Gelman Acrodisc).
- 7. Incubation with first antibody 2 h at room temperature or overnight at 4°C in blocking solution. The antibody preparation should be centrifuged before use (10,000 g 5 min.). Optimal working dilutions and incubation time will need to be determined by the end user.
- 8. Wash 4 x 10 min. with PBS-0.1% tween 20. From this stage, azide should be omitted.
- 9. Incubation with the secondary antibody (HRP-conjugated goat anti-rabbit antibody, for example Chemicon Catalog Number AP132P, diluted appropriately) 1 h at room temperature.
- 10. Wash 4 x 10 min. with PBS-0.1% tween 20.
- 11. Perform ECL with commercial kits (Chemilucent, Chemicon Catalog Number 2600).



Western blotting of rat brain membranes

- 1. AB5158 (1:200)
- 2. AB5158 preincubated with control peptide

Important Note:

During shipment, small volumes of product will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 µL or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap.

FOR RESEARCH USE ONLY; NOT FOR USE IN DIAGNOSTIC PROCEDURES. NOT FOR HUMAN OR ANIMAL CONSUMPTION

Unless otherwise stated in our catalog or other company documentation accompanying the product(s), our products are intended for research use only and are not to be used for any other purpose, which includes but is not limited to, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses or any type of consumption or application to humans or animals.



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