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RABBIT ANTI-Ca_v1.2 **AFFINITY PURIFIED POLYCLONAL ANTIBODY**

CATALOG NUMBER: AB5156

LOT NUMBER:

QUANTITY: 200 μL

CONCENTRATION: 0.6 mg/mL (after reconstitution)

SPECIFICITY: Recognizes Ca_v1.2 (α_{1C} L-type of Voltate-Gated Ca²⁺ Channel, Cacna1c). Does not cross

react with any other calcium channel antigens tested so far.

IMMUNOGEN: Purified peptide from amino acids 848-865 of α_{1C} subunit of rat brain voltage-gated calcium

channel (Accession number P22002).

APPLICATIONS: all subunits of voltage-gated Ca2+ channels are highly sensitive to proteases. 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 μg/mL), leupeptin (1 μg/mL), aprotinin (1 μg/mL), Pefabloc SC (0.2 mM), benzamidine (0.1 mg/mL), and calpain

inhibitors I and II (8 μg/mL each) (4).

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

Immunohistochemistry on rat brain sections.

Immunoprecipitation

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 μL 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: Human, rat, rabbit and mouse. Other species have not been tested.

FORMAT: Affinity purified immunoglobulin.

PRESENTATION: Lyophilized from phosphate buffered saline, pH 7.4, containing 1% BSA 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 add glycerol (ASC grade or better) at a ratio of 1:1 and maintain at -20°C for

up to 6 months. Avoid repeated freeze/thaw cycles.

REFERENCES: 1) Dolmetsch, R.E., et al., Science (2001) 294:333-339.



SUGGESTED WESTERN BLOT PROTOCOL

- 1. Mix the samples (organ membranes: $50 \mu g/lane$; transfected cells: 500,000 cells/lane) with sample-buffer X 2, and heat 10 min at 70°C .
- 2. 5-50 μ L 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.
- 3. Transfer in semi-dry system under standard conditions (3 h 100 mA for two minigel gels)
- 4. Stain the transferred bands with Chemicon BLOT-FastStain (Catalog Number 2076).
- 5. 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).

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.

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