

ARG59870 anti-CACNA2D2 antibody

Package: 100 µl
Store at: -20°C

Summary

| | |
|---------------------|---|
| Product Description | Rabbit Polyclonal antibody recognizes CACNA2D2 |
| Tested Reactivity | Ms, Rat |
| Tested Application | WB |
| Host | Rabbit |
| Clonality | Polyclonal |
| Isotype | IgG |
| Target Name | CACNA2D2 |
| Species | Human |
| Immunogen | Recombinant fusion protein corresponding to aa. 20-200 of Human CACNA2D2 (NP_001167522.1). |
| Conjugation | Un-conjugated |
| Alternate Names | CACNA2D; Voltage-gated calcium channel subunit alpha-2/delta-2; Voltage-dependent calcium channel subunit alpha-2/delta-2 |

Application Instructions

| | | |
|-------------------|--|----------------|
| Application table | Application | Dilution |
| | WB | 1:200 - 1:2000 |
| Application Note | * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist. | |
| Positive Control | Rat brain and Mouse brain | |
| Observed Size | 140 kDa | |

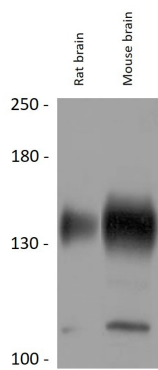
Properties

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|---------------------|---|
| Form | Liquid |
| Purification | Affinity purified. |
| Buffer | PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol. |
| Preservative | 0.02% Sodium azide |
| Stabilizer | 50% Glycerol |
| Storage instruction | For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use. |
| Note | For laboratory research only, not for drug, diagnostic or other use. |

Bioinformation

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|-----------------------|--|
| Gene Symbol | CACNA2D2 |
| Gene Full Name | calcium channel, voltage-dependent, alpha 2/delta subunit 2 |
| Background | Calcium channels mediate the entry of calcium ions into the cell upon membrane polarization. This gene encodes the alpha-2/delta subunit of the voltage-dependent calcium channel complex. The complex consists of the main channel-forming subunit alpha-1, and auxiliary subunits alpha-2/delta, beta, and gamma. The auxiliary subunits function in the assembly and membrane localization of the complex, and modulate calcium currents and channel activation/inactivation kinetics. The subunit encoded by this gene undergoes post-translational cleavage to yield the extracellular alpha2 peptide and a membrane-anchored delta polypeptide. This subunit is a receptor for the antiepileptic drug, gabapentin. Mutations in this gene are associated with early infantile epileptic encephalopathy. Single nucleotide polymorphisms in this gene are correlated with increased sensitivity to opioid drugs. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Mar 2014] |
| Function | The alpha-2/delta subunit of voltage-dependent calcium channels regulates calcium current density and activation/inactivation kinetics of the calcium channel. Acts as a regulatory subunit for P/Q-type calcium channel (CACNA1A), N-type (CACNA1B), L-type (CACNA1C OR CACNA1D) and possibly T-type (CACNA1G). Overexpression induces apoptosis. [UniProt] |
| Calculated Mw | 130 kDa |
| PTM | May be proteolytically processed into subunits alpha-2-2 and delta-2 that are disulfide-linked. It is however unclear whether such cleavage really takes place in vivo and has a functional role (By similarity). [UniProt] |
| Cellular Localization | Membrane; Single-pass type I membrane protein. Note=Colocalizes with CACNA1A in lipid raft fractions. [UniProt] |

Images



ARG59870 anti-CACNA2D2 antibody WB image

Western blot: 25 µg of Rat brain and Mouse brain lysates stained with ARG59870 anti-CACNA2D2 antibody at 1:1000 dilution.