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# Anti-Calretinin Picoband Antibody

Catalog # ABO11939

## Product Information

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|---|---|
| **Application** | WB, IHC-P |
| **Primary Accession** | P22676 |
| **Host** | Rabbit |
| **Reactivity** | Human, Mouse, Rat |
| **Clonality** | Polyclonal |
| **Format** | Lyophilized |
| **Description** | Rabbit IgG polyclonal antibody for Calretinin(CALB2) detection. Tested with WB, IHC-P in Human;Mouse;Rat. |
| **Reconstitution** | Add 0.2ml of distilled water will yield a concentration of 500ug/ml. |

## Additional Information

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| **Gene ID** | 794 |
| **Other Names** | Calretinin, CR, 29 kDa calbindin, CALB2, CAB29 |
| **Calculated MW** | 31540 |
| **Application Details** | Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, Mouse, Rat, By Heat<br>Western blot, 0.1-0.5 □g/ml, Mouse, Rat, Human |
| **Tissue Specificity** | Brain. |
| **Source** | Eukaryota |
| **Protein Name** | Calretinin |
| **Contents** | Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3. |
| **Immunogen** | A synthetic peptide corresponding to a sequence at the C-terminal of human Calretinin(234-262aa EMNIQQLTNYRKSVMSLAEAGKLYRKDLE), different from the related mouse and rat sequences by one amino acid. |
| **Purification** | Immunogen affinity purified. |
| **Cross Reactivity** | No cross reactivity with other proteins |
| **Storage** | At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing. |
| **Sequence Similarities** | Belongs to the calbindin family. |

## Protein Information

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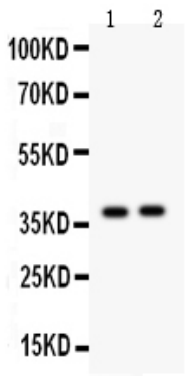
| **Name** | CALB2 ( HGNC:1435) |
| **Synonyms** | CAB29 |
| **Function** | Calcium-binding protein involved in calcium homeostasis and signal transduction. It plays a critical role in buffering intracellular calcium levels and modulating calcium-dependent signaling pathways (PubMed:2001709). Predominantly expressed in specific neuronal populations, influences synaptic plasticity and neuronal excitability, contributing to learning and memory (By similarity). During embryonic development, it facilitates neuronal differentiation and maturation (By similarity). |
| **Cellular Location** | Synapse {ECO:0000250\|UniProtKB:Q08331}. Cell projection, dendrite {ECO:0000250\|UniProtKB:Q08331}. Note=Located in dendrioles, small dendrites that makes up a brush structure found as the terminal specialization of a dendrite of a unipolar brush cell {ECO:0000250\|UniProtKB:Q08331} |
| **Tissue Location** | Brain. |

## Background

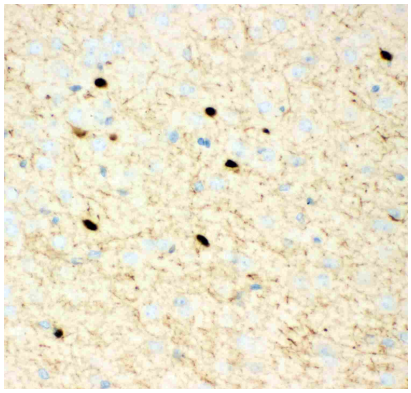
Calretinin, also known as 29 kDa calbindin, is a vitamin D-dependent calcium-binding protein involved in calcium signaling. In humans, the calretinin protein is encoded by the CALB2 gene. This gene encodes an intracellular calcium-binding protein belonging to the troponin C superfamily. Members of this protein family have six EF-hand domains which bind calcium. Calretinin is mapped to 16q22.2. This protein plays a role in diverse cellular functions, including message targeting and intracellular calcium buffering. It also functions as a modulator of neuronal excitability and is a diagnostic marker for some human diseases, including Hirschsprung disease and some cancers.

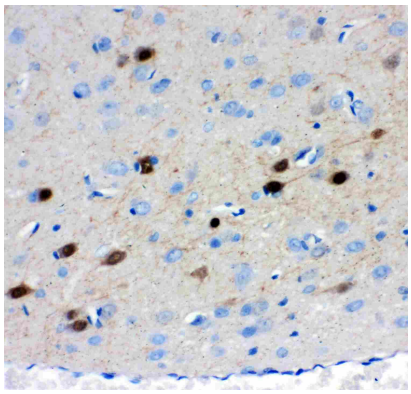
## Images



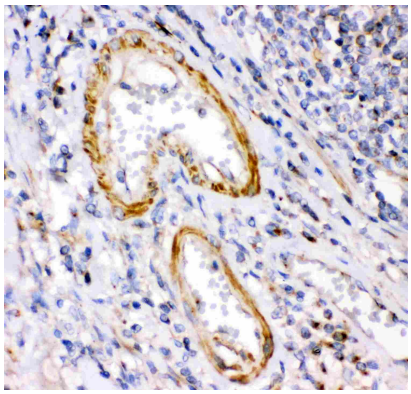

Anti- Calretinin Picoband antibody, ABO11939, Western blottingAll lanes: Anti Calretinin (ABO11939) at 0.5ug/mlLane 1: Rat Brain Tissue Lysate at 50ugLane 2: Mouse Brain Tissue Lysate at 50ugPredicted bind size: 31KDObserved bind size: 38KD

Anti- Calretinin Picoband antibody, ABO11939, IHC(P)IHC(P): Mouse Brain Tissue





Anti- Calretinin Picoband antibody, ABO11939, IHC(P)IHC(P): Rat Brain Tissue



Anti- Calretinin Picoband antibody, ABO11939, IHC(P)IHC(P): Human Intestinal Cancer Tissue