10320 Camino Santa Fe, Suite G
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Anti-Calretinin Picoband Antibody
Catalog # ABO11939

Specification

Anti-Calretinin Picoband Antibody - Product Information

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.

Anti-Calretinin Picoband Antibody - Additional Information

Gene ID 794

Other Names
Calretinin, CR, 29 kDa calbindin, CALB2, CAB29

Calculated MW
31540 MW KDa

Application Details
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat
Western blot, 0.1-0.5 µg/ml, Mouse, Rat, Human

Tissue Specificity
Brain.

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.

Anti-Calretinin Picoband Antibody - Protein Information

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.

Anti-Calretinin Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Calretinin Picoband Antibody - Images

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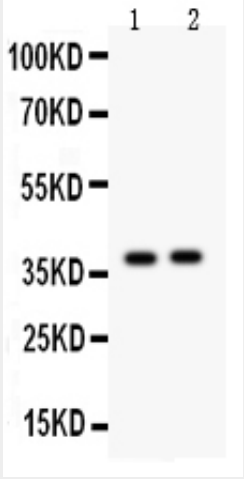
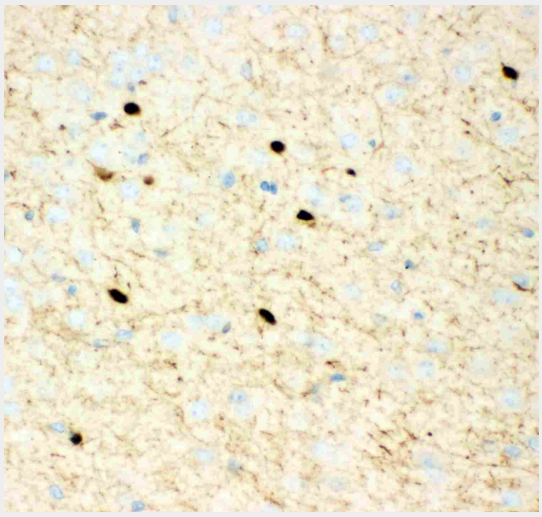
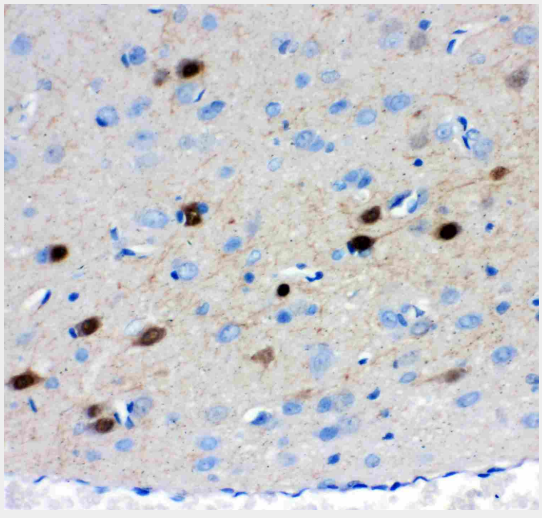


Anti- Calretinin Picoband antibody, ABO11939, Western blottingAll lanes: Anti Calretinin (ABO11939) at 0.5ug/mlLane 1: Rat Brain Tissue Lysate at 50ugLane 2: Mouse Brain Tissue Lysate at 50ugPredicted bind size: 31KDObserved bind size: 38KD



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



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

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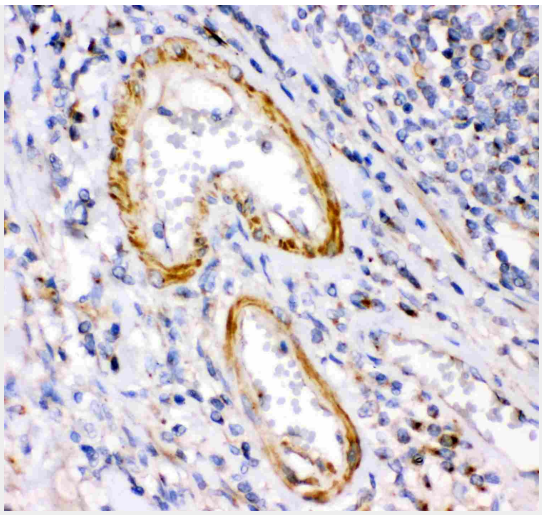

Anti- Calretinin Picoband antibody, ABO11939, IHC(P)IHC(P): Human Intestinal Cancer Tissue

Anti-Calretinin Picoband Antibody - 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.