

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 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 μ g/ml, Human, Mouse, Rat, By Heat
br>Western blot, 0.1-0.5 μ g/ml, Mouse, Rat, Human
cbr>

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 ReactivityNo 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 SimilaritiesBelongs 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.

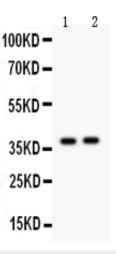
Anti-Calretinin Picoband Antibody - Protocols

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

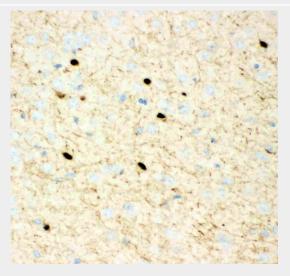
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Calretinin Picoband Antibody - Images

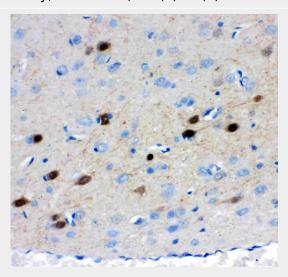




Anti- Calretinin Picoband antibody, ABO11939, Western blottingAll lanes: Anti Calretinin (ABO11939) at 0.5ug/mlLane 1: Rat Brain Tissue Lysate at 50ugLane 2: Mouse Brain Tissue Lysate at 50ugPredicted bind size: 31KDObserved bind size: 38KD

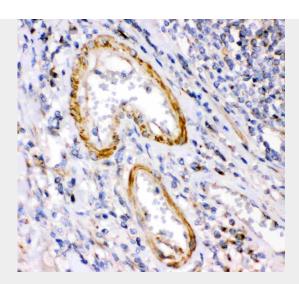


Anti- Calretinin Picoband antibody, ABO11939, IHC(P)IHC(P): Mouse Brain Tissue



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

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.