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Polyclonal Anti-Calretinin Picoband™ Antibody

Catalog Number: PB9248

Description

Gene Name	calbindin 2
Recommended Protein Name	Calretinin
Lot No.	0921512Da564811
Size	100μg/vial
Form	lyophilized
Ig type	Rabbit IgG
Specificity	No cross reactivity with other proteins.
Purification	Immunogen affinity purified.
Species	**Reacts with:** human, mouse, rat
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.
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na_2HPO_4, 0.05mg NaN_3.

Application

	Concentration	Tested Species	Predicted Species	Antigen Retrieval
Western blot	0.1-0.5μg/ml	Ms, Rat	Hu	-
Immunohistochemistry (Paraffin-embedded Section)	0.5-1μg/ml	Hu, Ms, Rat	-	By Heat

Tested Species: In-house tested species with positive results.

Predicted Species: Species predicted to be fit for the product based on sequence similarities.

By Heat: Boiling the paraffin sections in 10mM citrate buffer, pH6.0, for 20mins is required for the staining of formalin/paraffin sections.

Other applications have not been tested.

Optimal dilutions should be determined by end users.

Preparation and storage

Reconstitution: 0.2ml of distilled water will yield a concentration of 500μg/ml.

Storage: At -20˚C for one year. After reconstitution, 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.

Relevant detection systems

Boster provides a series of assays reacted with primary antibodies. Antibody can be supported by chemiluminescence kit EK1002 in WB, supported by SA1022 in IHC(P).

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.

Reference

1. Parmentier M.; "The human calbindins: cDNA and gene cloning.";Adv. Exp. Med. Biol. 255:233-240(1989).
2. Strauss K.I., Kuznicki J., Winsky L., Kawagoe J.I., Hammer M., Jacobowitz D.M.;"The mouse calretinin gene promoter region: structural and functional components.";Brain Res. Mol. Brain Res. 49:175-187(1997).
3. Gabrielides C., McCormack A.L., Hunt D.F., Christakos S.;"Brain calbindin-D28k and an Mr 29,000 calcium binding protein in cerebellum are different but related proteins: evidence obtained from sequence analysis by tandem mass spectrometry.";Biochemistry 30:656-662(1991).