

Hippocalcin Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP1564a

Product Information

Application	IHC-P, WB, E
Primary Accession	P84074
Other Accession	P84076 , Q06AT1 , P84075 , Q4PL64
Reactivity	Human, Rat, Mouse
Predicted	Bovine, Pig, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	22427
Antigen Region	2-32

Additional Information

Gene ID	3208
Other Names	Neuron-specific calcium-binding protein hippocalcin, Calcium-binding protein BDR-2, HPCA, BDR2
Target/Specificity	This Hippocalcin antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 2-32 amino acids from the N-terminal region of human Hippocalcin.
Dilution	IHC-P~~1:100~500 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Hippocalcin Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	HPCA (HGNC:5144)
Synonyms	BDR2
Function	Calcium-binding protein that may play a role in the regulation of

voltage-dependent calcium channels (PubMed:[28398555](#)). May also play a role in cyclic-nucleotide-mediated signaling through the regulation of adenylate and guanylate cyclases (By similarity).

Cellular Location

Cytoplasm, cytosol {ECO:0000250|UniProtKB:P84076, ECO:0000269|PubMed:28398555}. Membrane {ECO:0000250|UniProtKB:P84076}; Peripheral membrane protein {ECO:0000250|UniProtKB:P84076} Note=Association with membranes is calcium-dependent (By similarity) Enriched in the perinuclear region, probably at the trans Golgi network in response to calcium (PubMed:28398555) {ECO:0000250|UniProtKB:P84076, ECO:0000269|PubMed:28398555}

Tissue Location

Brain specific..

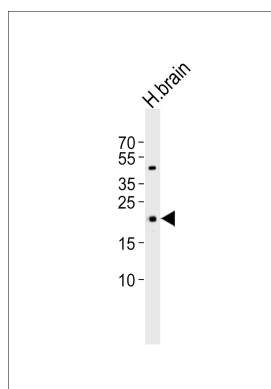
Background

Hippocalcin is a member of neuron-specific calcium-binding proteins family found in the retina and brain. This protein is associated with the plasma membrane. It has similarities to proteins located in the photoreceptor cells that regulate photosignal transduction in a calcium-sensitive manner. This protein displays recoverin activity and a calcium-dependent inhibition of rhodopsin kinase. It is identical to the rat and mouse hippocalcin proteins and thought to play an important role in neurons of the central nervous system in a number of species.

References

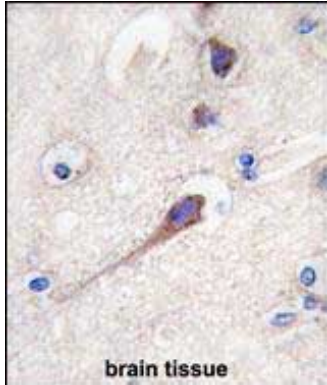
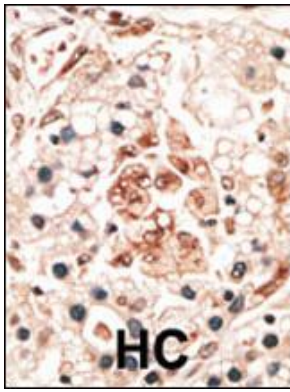
- Takamatsu, K., et al., *Biochem. Biophys. Res. Commun.* 200(1):606-611 (1994).
Hidaka, H., et al., *Neurosci. Res.* 16(2):73-77 (1993).
Kobayashi, M., et al., *Biochem. Biophys. Res. Commun.* 189(1):511-517 (1992).
Masaki, T., et al., *Gene* 225 (1-2), 117-124 (1998).
Ivings, L., et al., *Biochem. J.* 363 (Pt 3), 599-608 (2002).

Images



Western blot analysis of lysate from human brain tissue lysate, using Hippocalcin Antibody (R17) (Cat. #AP1564A) . AP1564A was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug.

Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.



Formalin-fixed and paraffin-embedded human brain tissue reacted with Hippocalcin antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

Citations

- [Mixed lineage kinase 2 and hippocalcin are localized in Lewy bodies of Parkinson's disease.](#)
- [\[Mineral metabolism and aluminum burden with hydrotalcit. A placebo-controlled randomized double-blind study\].](#)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.