

### Hippocalcin Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP1564a

# **Specification**

### Hippocalcin Antibody (N-term) - Product Information

Application WB, IHC-P,E

Primary Accession <u>P84074</u>

Other Accession <u>P84076</u>, <u>Q06AT1</u>, <u>P84075</u>, <u>Q4PL64</u>

Reactivity Human, Mouse Predicted Bovine, Pig, Rat

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG

Antigen Region 2-32

### Hippocalcin Antibody (N-term) - 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**

WB~~1:1000 IHC-P~~1:50~100

#### **Format**

Purified polyclonal 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.

### Hippocalcin Antibody (N-term) - 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**

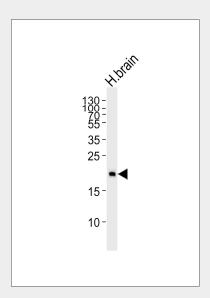
Brain specific...

### Hippocalcin Antibody (N-term) - Protocols

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

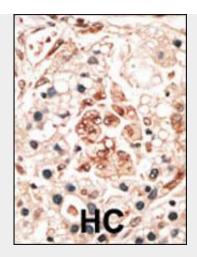
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

### Hippocalcin Antibody (N-term) - 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.

# Hippocalcin Antibody (N-term) - 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.

# **Hippocalcin Antibody (N-term) - 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).

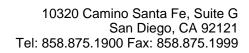
Kobayashi, M., et al., Biochem. Biophys. Res. Commun. 189(1):511-517 (1992).

Masaki, T., et al., Gene 225 (1-2), 117-124 (1998).

Ivings, L., et al., Biochem. J. 363 (Pt 3), 599-608 (2002).

# Hippocalcin Antibody (N-term) - 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].