

## Rabbit Hippocalcin Polyclonal Antibody | anti-HPCA antibody

Hippocalcin Antibody

| CATALOG # | HOST   | REACTIVITY                                                                                                                                      | APPLICATIONS |
|-----------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| AAA329209 | Rabbit | Human, Mouse, RatPredicted Reactivity: Pig(100%), Zebrafish(88%), Bovine(100%), Horse(100%), Sheep(100%), Dog(100%), Chicken(88%), Xenopus(88%) | ELISA        |

### PRODUCT SYNONYMS

Hippocalcin; Polyclonal Antibody; Hippocalcin Antibody; BDR 2; BDR2; Calcium binding protein BDR 2; Calcium binding protein BDR2; Calcium-binding protein BDR-2; HPCA; HPCA\_HUMAN; Neuron specific calcium binding protein hippocalcin; Neuron-specific calcium-binding protein hippocalcin; P23K; anti-HPCA antibody

### PRODUCT SPECIFICATIONS

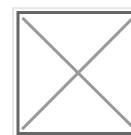
|                                                |                                                                                                                                                     |
|------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                           | Rabbit                                                                                                                                              |
| Reactivity                                     | Human, Mouse, Rat<br>Predicted Reactivity: Pig(100%), Zebrafish(88%), Bovine(100%), Horse(100%), Sheep(100%), Dog(100%), Chicken(88%), Xenopus(88%) |
| Clonality                                      | Polyclonal                                                                                                                                          |
| Isotype                                        | IgG                                                                                                                                                 |
| Specificity                                    | Hippocalcin Antibody detects endogenous levels of total Hippocalcin.                                                                                |
| Purity/Purification                            | The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin (Thermo Fisher Scientific).                            |
| Form/Format                                    | Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol                                             |
| Concentration                                  | 1mg/ml (varies by lot)                                                                                                                              |
| Sequence Length                                | 193                                                                                                                                                 |
| Applicable Applications for anti-HPCA antibody | ELISA                                                                                                                                               |
| Immunogen                                      | A synthesized peptide derived from human Hippocalcin, corresponding to a region within the internal amino acids.                                    |
| Fragment                                       | Fab fragment                                                                                                                                        |
| Preparation and Storage                        | Store at -20 degree C. Stable for 12 months from date of receipt.                                                                                   |

### IMAGES



#### IF (Immunofluorescence)

AAA329209 staining HeLa cells by IF/ICC. The samples were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25°C. Samples were then incubated with primary Ab(AAA329209 1:200) and mouse anti-beta tubulin Ab(T0023 1:200) for 1 hour at 37°C. An AlexaFluor594 conjugated goat anti-rabbit IgG(H+L) Ab(Red) and an AlexaFluor488 conjugated goat anti-mouse IgG(H+L) Ab(Green) were used as the secondary antibody. The nuclear counter stain is DAPI(blue).



#### WB (Western Blot)

Western blot analysis of extracts from B16F10 cells, using Hippocalcin Antibody. The lane on the left was treated with blocking peptide. Observed bands: 18 kDa.

ADDITIONAL INFORMATION

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|--------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for anti-<br>HPCA antibody | <p>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).</p> <p>Post Translational Modifications: Myristoylation facilitates association with membranes.</p> <p>Subcellular Location: Cytoplasm&gt;Cytosol. Membrane&gt;Peripheral membrane protein. 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).</p> <p>Tissue Specificity: Brain specific.</p> <p>Subunit Structure: Oligomer; oligomerization is calcium-dependent (PubMed:28398555). May interact with the voltage-dependent P/Q- and N-type calcium channels CACNA1A and CACNA1B (PubMed:28398555).</p> <p>Similarity: Binds 3 calcium via EF-hand domains. The cryptic EF-hand 1 does not bind calcium.Belongs to the recoverin family.</p> |
|--------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

NCBI AND UNIPROT INFORMATION

|                                  |                                                                                                    |
|----------------------------------|----------------------------------------------------------------------------------------------------|
| NCBI GI #                        | 19913446                                                                                           |
| NCBI GeneID                      | 3208                                                                                               |
| NCBI Accession #                 | NP_002134                                                                                          |
| NCBI GenBank Nucleotide #        | NP_002134.2                                                                                        |
| UniProt Accession #              | P84074                                                                                             |
| Molecular Weight                 | Observed Molecular Weight: (Observed)22kD, 18kD.<br>Predicted Molecular Weight: (Calculated)22kDa. |
| NCBI Official Full Name          | neuron-specific calcium-binding protein hippocalcin                                                |
| NCBI Official Synonym Full Names | hippocalcin                                                                                        |
| NCBI Official Symbol             | HPCA                                                                                               |
| NCBI Official Synonym Symbols    | BDR2; DYT2                                                                                         |
| NCBI Protein Information         | neuron-specific calcium-binding protein hippocalcin                                                |
| UniProt Protein Name             | Neuron-specific calcium-binding protein hippocalcin                                                |
| UniProt Gene Name                | HPCA                                                                                               |
| UniProt Synonym Gene Names       | BDR2                                                                                               |
| UniProt Entry Name               | HPCA_HUMAN                                                                                         |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.