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PRODUCT DATASHEET

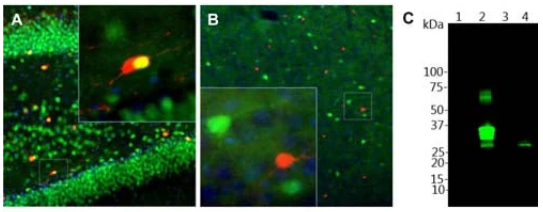
Anti-Calretinin (CR) Antibody

Product Details

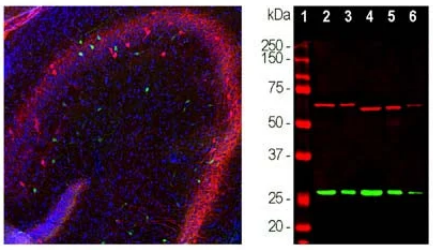
Available Variants	50 µL (SKU:C-1801-50)
Conjugate	Unconjugated
Isotype	IgY
Host Species	Chicken
Format	IgY preparation
Physical State	Lyophilized
Buffer	Lyophilized IgY preparation, with sodium azide.
Applications	ICC, WB
Dilution Ranges	WB: 1:1000-1:5000 IHC: 1:1000-1:5000
Species Reactivity	Bovine, Human, Mouse, Rat
Immunogen	Full-length recombinant human protein
Specificity	Reacts with human, cow, rat, mouse. Antibody is specific for calretinin and does not recognize closely related proteins parvalbumin and calbindin as determined by Western Blotting.
Storage	Spin vial briefly before opening. Reconstitute with 50 µL sterile-filtered, ultrapure water. Centrifuge to remove any insoluble material. Store lyophilized antibody at 2-8°C. After reconstitution divide into aliquots and store at -20°C for long-term storage. Store at 2-8°C short-term (up to 4 weeks) with an appropriate antibacterial agent. Avoid repetitive freeze/thaw cycles.
UniProt ID	P22676 UniProt Summary: 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. Predominantly expressed in specific neuronal populations, influences synaptic plasticity and

	neuronal excitability, contributing to learning and memory. During embryonic development, it facilitates neuronal differentiation and maturation.
Country of Origin	United States
Shipping	25°C (ambient)
Expiration	12 months after date of receipt (unopened vial).
Usage Statement	For research use only.
NCBI Gene ID	794

Product Images



A: Adult rat brain hippocampus section stained for calretinin (red) and MeCP2 (green) by **Immunohistochemistry**. The chicken anti-Calretinin antibody labels a subset of hippocampal interneurons, which also express MeCP2 (R-1810-100). Co-staining is demonstrated in the nucleus by a yellow color. B: Adult rat cortex section co-stained for calretinin (red) and calbindin (M-1797-100, green). Each antibody specifically labels a subset of interneurons (i.e., calretinin-positive or calbindin-postive) that express each marker exclusively. Insets are high-magnification images of the boxed area in each picture. Blue: Nuclear DNA stained with DAPI. IHC method: 45 um sections; tissue was fixed by transcardial perfusion with 4% paraformaldehyde. C: **Western blot** of proteins parvalbumin (Lane 1), calretinin (Lane 2), calbindin (Lane 3) and rat brain homogenate (Lane 4) with chicken anti-calretinin antibody (1:1,000). Absence of immunreactivity with parvalbumin (Lane 1) and calbindin (Lane 3) demonstrates specificity of this antibody for calretinin (Lane 2). In rat brain, this antibody recognizes a single band at ~32 kDa, corresponding to calretinin.



Left: Staining of rat hippocampus with chicken anti-calretinin (green, 1:1,000) and mouse anti-parvalbumin (M-1813-100, red, 1:1,000) by **Immunohistochemistry**. *IHC Method*: Following transcardial perfusion of rat with 4% paraformaldehyde, brain was post fixed for 24 hours, cut to 45 um, and free-floating sections were stained. The calretinin and parvalbumin antibodies label different classes of interneurons. Blue: Nuclear DNA stain. **Right: Western blot** analysis of calretinin expression (green, 1:1,000) in rat brain (2) and spinal cord (3), mouse brain (4) and spinal cord (5), and cow spinal cord (6). A band at 29 kDa corresponds to calretinin protein. The same blot was simultaneously probed with a mouse anti-internexin antibody (red).
