



PhosphoSolutions®
Antibodies that work™

Colorado Biosciences Park
12635 East Montview Boulevard, #213
Aurora, CO 80045-7337
Tel: (888) 442-7100

Anti-Calretinin

Catalog Number: 303-CAL

Size: 100 µL

Product Description: Sheep polyclonal antibody

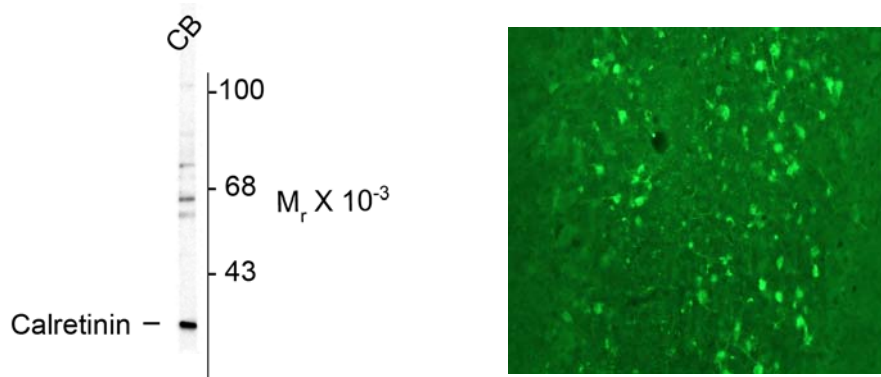
Applications: **WB:** 1:1,000 **IHC/IF:** 1:500

Antigen: Purified guinea pig calretinin.

Species reactivity: The antibody has been directly tested for reactivity in rat. It is expected that this antibody will also react with human, mouse and non-human primates.

Biological Significance: Calretinin is a calcium-binding protein involved in calcium signaling. It is abundantly expressed throughout the central nervous system, retina and many other tissues. Studies have shown that calretinin may play a role in neuroprotection by buffering intracellular calcium (Lukas and Jones 1994, Weisenhorn et al., 1996). Additionally, calretinin selectively stains mesothelial cells thus making it an important marker for differentiating malignant mesothelioma from carcinomas (Attanoos et al., 2000).

Anti-Calretinin



Left: Western blot of rat cerebellum (CB) lysate showing specific immunolabeling of the ~29k calretinin protein. **Right: Immunostaining** of rat cerebellum showing fluorescence of calretinin containing cells.

Purification Method: Protein A purified sheep serum.

Antibody Specificity: Specific for the ~29 kDa calretinin protein in Western blots of rat brain lysate. The antibody also works well for Immunohistochemistry on formalin or paraformaldehyde perfused rat brain tissue sections.

Quality Control Tests: Western blots performed on each lot.

References:

Attanoos RL, Dojcinov SD, Webb R, Gibbs AR. (2000) Anti-mesothelial markers in sarcomatoid mesothelioma and other spindle cell neoplasms. *Histopathology*.37(3):224-31.

Isaacs KR, Winsky L, Strauss KI, Jacobowitz DM. (1995) Quadruple colocalization of calretinin, calcitonin gene-related peptide, vasoactive intestinal peptide, and substance P in fibers within the villi of the rat intestine. *Cell Tissue Res.*, 280(3):639-51.

Lukas W, Jones KA (1994) Cortical neurons containing calretinin are selectively resistant to calcium overload and excitotoxicity in vitro. *Neurosci.* 61(2):307-16.

Weisenhorn DMV, Weruaga-Prieto E, Celio MR (1996) Calretinin immunoreactivity in organotypic cultures of the rat cerebral cortex: effects of serum deprivation. *Exp. Brain Res.* 108(1):101-112.

WB = Western Blot **IF** = Immunofluorescence **IHC** = Immunohistochemistry **IP** = Immunoprecipitation

Packaging: 100 ul in 10 mM Tris, 100 mM NaCl.

Storage and Stability: Store at -20°C in undiluted aliquots; stable for at least one year after date of receipt. Avoid freeze/thaw cycles.

Shipment: Domestic - Blue Ice; International - Blue Ice or Dry Ice.

For Research Use Only.