

Calretinin (I-13): sc-26512

BACKGROUND

Calbindin D28K and Calretinin (also designated CR or 29 kDa Calbindin) are 2 closely related intracellular calcium-binding proteins belonging to the Troponin-C superfamily. Initially isolated from chick retina, Calretinin shares 58% identical residues with human Calbindin D28K. Calretinin is expressed in the brain and is particularly abundant in auditory neurons with precisely timed discharges. Neurons in the nucleus accumbens containing Calretinin all possess nuclear indentations. Calretinin-immunoreactive boutons form asymmetrical and symmetrical synaptic specializations on spines, dendrites and somata. The symmetrical synaptic specializations have medium-sized spiny neurons and contact other Calretinin-immunoreactive somata. Calretinin is widely used as a immunocytochemical marker for mesothelioma.

CHROMOSOMAL LOCATION

Genetic locus: CALB2 (human) mapping to 16q22.2; Calb2 (mouse) mapping to 8 E1.

SOURCE

Calretinin (I-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Calretinin of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-26512 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

Calretinin (I-13) is recommended for detection of Calretinin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Calretinin (I-13) is also recommended for detection of Calretinin in additional species, including avian.

Suitable for use as control antibody for Calretinin siRNA (h): sc-43347, Calretinin siRNA (m): sc-43348, Calretinin shRNA Plasmid (h): sc-43347-SH, Calretinin shRNA Plasmid (m): sc-43348-SH, Calretinin shRNA (h) Lentiviral Particles: sc-43347-V and Calretinin shRNA (m) Lentiviral Particles: sc-43348-V.

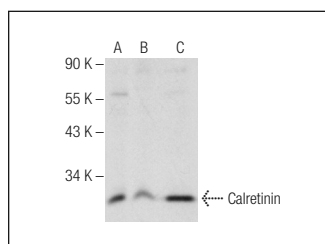
Molecular Weight of Calretinin: 29 kDa.

Positive Controls: rat brain extract: sc-2392, mouse brain extract: sc-2253 or mouse cerebellum extract: sc-2403.

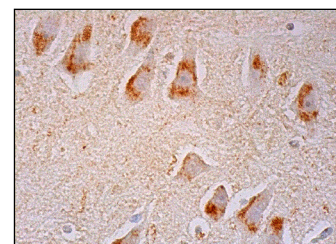
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



Calretinin (I-13): sc-26512. Western blot analysis of Calretinin expression in mouse cerebellum (A), rat brain (B) and mouse brain (C) tissue extracts.



Calretinin (I-13): sc-26512. Immunoperoxidase staining of formalin fixed, paraffin-embedded human hippocampus tissue showing cytoplasmic staining of neuronal cells.

SELECT PRODUCT CITATIONS

1. Marshall, A.G., et al. 2009. Effect of gestational ethanol exposure on parvalbumin and calretinin expressing hippocampal neurons in a chick model of fetal alcohol syndrome. *Alcohol* 43: 147-161.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **Calretinin (H-5): sc-365956** or **Calretinin (D-12): sc-365989**, our highly recommended monoclonal alternatives to Calretinin (I-13).