

Calretinin (F-17): sc-26513

BACKGROUND

Calbindin D28K and Calretinin (also designated CR or 29 kDa Calbindin) are two 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 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.

REFERENCES

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2. Parmentier, M. and Lefort, A. 1991. Structure of the human brain calcium-binding protein calretinin and its expression in bacteria. *Eur. J. Biochem.* 196: 79-85.
3. Dreher, B., Barker, D.A., Bath, M.R. and Keay, K.A. 1996. Spatiotemporal pattern of ontogenetic expression of calbindin-28/kD in the retinorecipient layers of rat superior colliculus. *J. Comp. Neurol.* 376: 223-240.
4. Hussain, Z., Johnson, L.R. and Totterdell, S. 1996. A light and electron microscopic study of NADPH-diaphorase-, Calretinin- and parvalbumin-containing neurons in the rat nucleus accumbens. *J. Chem. Neuroanat.* 10: 19-39.
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CHROMOSOMAL LOCATION

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

SOURCE

Calretinin (F-17) 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-26513 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 (F-17) 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), immunofluorescence (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 (F-17) is also recommended for detection of Calretinin in additional species, including equine, canine, bovine, porcine and 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 cerebellum extract: sc-2398, rat brain extract: sc-2392 or mouse brain extract: sc-2253.

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) 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.

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 (F-17).