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 an immunocytochemical marker for mesothelioma.

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

SOURCE
Calretinin (N-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus 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-11644 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS
Calretinin (N-18) 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000). Calretinin (N-18) is also recommended for detection of calretinin in additional species, including equine, bovine and porcine.

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, rat cerebellum extract: sc-2398 or mouse brain extract: sc-2253.

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.

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

DATA

SELECT PRODUCT CITATIONS

Try Calretinin (H-5): sc-365956 or Calretinin (D-12): sc-365989, our highly recommended monoclonal alternatives to Calretinin (N-18).