

Calumenin (D-19): sc-51045

BACKGROUND

Calumenin is a 315 amino acid Ca^{2+} -binding member of the CREC, EF-hand protein family. Calumenin is a secreted protein that contains six Ca^{2+} -binding (EF-hand) motifs and is expressed in the lumen of the endoplasmic reticulum (ER) and Golgi apparatus. In the presence of Ca^{2+} , Calumenin interacts with serum amyloid P component (SAP) and, together, they may play a role in the immunological defense system and participate in amyloidosis, the pathological formation of amyloid deposits in different types of tissues. Calumenin has an inhibitory effect on the vitamin K-dependent γ -carboxylation system which converts vitamin K-dependent proteins to Gla-containing proteins. Calumenin may also be involved in the pathophysiology of thrombosis and/or wound healing by acting in an autocrine or paracrine manner.

CHROMOSOMAL LOCATION

Genetic locus: CALU (human) mapping to 7q32.1; Calu (mouse) mapping to 6 A3.3.

SOURCE

Calumenin (D-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Calumenin 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-51045 P, (100 μg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

Calumenin (D-19) is recommended for detection of Calumenin 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).

Calumenin (D-19) is also recommended for detection of Calumenin in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Calumenin siRNA (h): sc-60320, Calumenin siRNA (m): sc-60321, Calumenin shRNA Plasmid (h): sc-60320-SH, Calumenin shRNA Plasmid (m): sc-60321-SH, Calumenin shRNA (h) Lentiviral Particles: sc-60320-V and Calumenin shRNA (m) Lentiviral Particles: sc-60321-V.

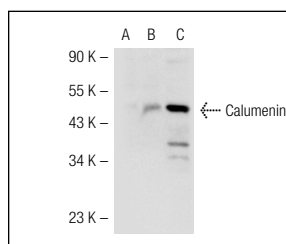
Molecular Weight of CalumeninL: 52/57 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203 or Calumenin (m): 293T Lysate: sc-118975

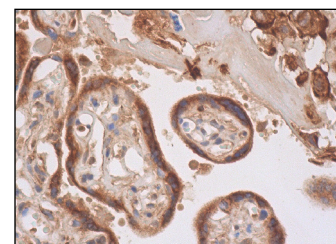
RECOMMENDED SECONDARY REAGENTS

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



Calumenin (D-19): sc-51045. Western blot analysis of Calumenin expression in non-transfected 293T: sc-117752 (A), mouse Calumenin transfected 293T: sc-118975 (B) and K-562 (C) whole cell lysates.



Calumenin (D-19): sc-51045. Immunoperoxidase staining of formalin fixed, paraffin-embedded human placenta tissue showing cytoplasmic staining of trophoblastic and decidual cells.

STORAGE

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

PROTOCOLS

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

MONOS
Satisfaction
Guaranteed

Try **Calumenin (F-8): sc-271357**, our highly recommended monoclonal alternative to Calumenin (D-19).