

# cornulin (N-14): sc-164097

## BACKGROUND

Cornulin, also known as tumor-related protein, CRNN, SEP53 (squamous epithelial heat shock protein 53), DRC1 or PDRC1, is a 495 amino acid cytoplasmic protein thought to play a role in epidermal differentiation and epithelial immune response. Specific to squamous epithelia cells, cornulin is expressed in esophagus, cultured primary keratinocytes, scalp skin, foreskin and fetal bladder. Cornulin shares structural homology with S-100 proteins, profilaggrin, Repetin and trichohyalin, and may be a potential marker for late epidermal differentiation and cancer development. Cornulin is upregulated by deoxycholic acid (DCA), heat shock and ponasterone A, and contains one EF-hand domain through which it protects cells from DCA-induced death. The gene encoding cornulin maps to human chromosome 1q21.3 and mouse chromosome 3 F2.1.

## CHROMOSOMAL LOCATION

Genetic locus: CRNN (human) mapping to 1q21.3; Crnn (mouse) mapping to 3 F2.1.

## SOURCE

cornulin (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of cornulin 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-164097 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

cornulin (N-14) is recommended for detection of cornulin 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).

cornulin (N-14) is also recommended for detection of cornulin in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for cornulin siRNA (h): sc-88337, cornulin siRNA (m): sc-142518, cornulin shRNA Plasmid (h): sc-88337-SH, cornulin shRNA Plasmid (m): sc-142518-SH, cornulin shRNA (h) Lentiviral Particles: sc-88337-V and cornulin shRNA (m) Lentiviral Particles: sc-142518-V.

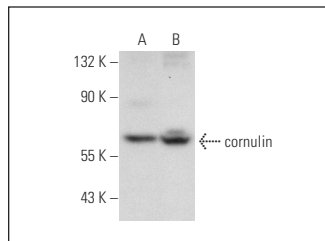
Molecular Weight of cornulin: 54 kDa.

Positive Controls: cornulin (m): 293T Lysate: sc-178428.

## 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.

## DATA



cornulin (N-14): sc-164097. Western blot analysis of cornulin expression in non-transfected: sc-117752 (A) and mouse cornulin transfected: sc-178428 (B) 293T whole cell lysates.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **cornulin (A-3): sc-514602**, our highly recommended monoclonal alternative to cornulin (N-14).