# Centrin-3 (K-19): sc-46851



The Power to Question

## **BACKGROUND**

The EF-hand type Ca<sup>2+</sup>-binding proteins family consists of several members, including Centrin-1, Centrin-2 and Centrin-3. The Centrin proteins are ubiquitously expressed cytoskeletal components that show increased expression during cell differentiation. Tissues where cilia are present, such as the retina and testis, express both Centrin-1 and -2, but Centrin-2 is also expressed in nondifferentiated, nonciliated retinal cells (retinoblastoma cells), liver, skeletal muscle and cardiac muscle. In these tissues, Centrin associates with the centrosomes, mitotic spindle poles and basal bodies. Knockdown studies reveal a requirement for Centrin in centriole duplication and organization of spindle pole morphology and the completion of cytokinesis. Centrin-3 plays a role in centrosome reproduction.

## **CHROMOSOMAL LOCATION**

Genetic locus: CETN3 (human) mapping to 5q14.3; Cetn3 (mouse) mapping to 13 C3.

## **SOURCE**

Centrin-3 (K-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Centrin-3 of human origin.

#### **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-46851 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**

Centrin-3 (K-19) is recommended for detection of Centrin-3 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), 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).

Centrin-3 (K-19) is also recommended for detection of Centrin-3 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Centrin-3 siRNA (h): sc-60361, Centrin-3 siRNA (m): sc-60362, Centrin-3 shRNA Plasmid (h): sc-60361-SH, Centrin-3 shRNA Plasmid (m): sc-60362-SH, Centrin-3 shRNA (h) Lentiviral Particles: sc-60361-V and Centrin-3 shRNA (m) Lentiviral Particles: sc-60362-V.

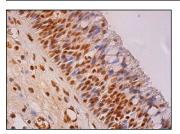
Molecular Weight of Centrin-3: 20 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204 or HeLa whole cell lysate: sc-2200.

#### **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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

#### **DATA**



Centrin-3 (K-19): sc-46851. Immunoperoxidase staining of formalin fixed, paraffin-embedded human nasopharynx tissue showing nuclear staining of respiratory epithelial cells.

## **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.



Try Centrin-3 (E-6): sc-365697 or Centrin-3 (SS12): sc-100933, our highly recommended monoclonal alternatives to Centrin-3 (K-19).

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com