

# APC4 (H-298): sc-20985

## BACKGROUND

The anaphase-promoting complex (APC) is composed of more than ten subunits, including APC1, APC2, APC4, APC5, APC7, APC8, APC10, and APC11. The APC acts in a cell-cycle dependent manner to promote the separation of sister chromatids during the transition between metaphase and anaphase in mitosis. APC, or cyclosome, accomplishes this progression through the ubiquitination of mitotic cyclins and other regulatory proteins that are targeted for destruction during cell division. APC is phosphorylated, and thus activated, by protein kinases Cdk1/cyclin B and polo-like kinase (Plk). APC is under tight control by a number of regulatory factors, including CDC20, CDH1 and MAD2. Specifically, CDC20 and CDH1 directly bind to and activate the cyclin-ubiquitination activity of APCs. In contrast, MAD2 inhibits APC by forming a ternary complex with CDC20 and APC, thus preventing APC activation. APC4, also known as ANAPC4, is an 808 amino acid component of the APC.

## CHROMOSOMAL LOCATION

Genetic locus: ANAPC4 (human) mapping to 4p15.2; Anapc4 (mouse) mapping to 5 C1.

## SOURCE

APC4 (H-298) is a rabbit polyclonal antibody raised against amino acids 509-806 mapping near the C-terminus of APC4 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.

## RESEARCH USE

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

## APPLICATIONS

APC4 (H-298) is recommended for detection of APC4 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).

APC4 (H-298) is also recommended for detection of APC4 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for APC4 siRNA (h): sc-29704, APC4 siRNA (m): sc-29705, APC4 shRNA Plasmid (h): sc-29704-SH, APC4 shRNA Plasmid (m): sc-29705-SH, APC4 shRNA (h) Lentiviral Particles: sc-29704-V and APC4 shRNA (m) Lentiviral Particles: sc-29705-V.

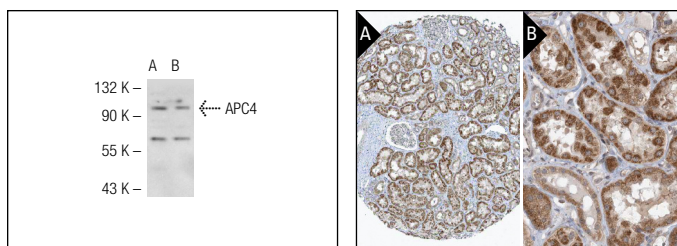
Molecular Weight of APC4: 100 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206, HeLa whole cell lysate: sc-2200 or APC4 (m): 293T Lysate: sc-118461.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

## DATA



APC4 (H-298): sc-20985. Western blot analysis of APC4 expression in non-transfected: sc-117752 (**A**) and mouse APC4 transfected: sc-118461 (**B**) 293T whole cell lysates.

APC4 (H-298): sc-20985. Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing cytoplasmic staining of cells in tubules in low (**A**) and high (**B**) resolution. Kindly provided by The Swedish Human Protein Atlas (HPA) program.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.

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Satisfaction  
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Try **APC4 (B-11): sc-514895** or **APC4 (G-1): sc-374173**, our highly recommended monoclonal alternatives to APC4 (H-298).