

APC16 (C-12): sc-135450

BACKGROUND

APC16, also known as ANAPC16 (anaphase promoting complex subunit 16), MSAG, cyclosome subunit 16 or metabolic syndrome-associated protein, is a 110 amino acid protein belonging to the APC16 family. Encoded by a gene that maps to human chromosome 10q22.1, APC16 contains four putative myristoylation sites and three phosphorylation sites. Highly conserved among mammalian species, APC16 of human, orangutan, monkey, mouse, horse and dog origin are identical. APC16 is a component of the anaphase promoting complex/cyclosome (APC/C), which is a cell cycle-regulated E3 ubiquitin ligase that controls cell cycle progression through mitosis and G₁. The APC/C complex mediates ubiquitination and degradation of target proteins. Composed of a minimum of twelve subunits, APC/C largely assists Lys-11-linked polyubiquitin chain formation, as well as Lys-48- and Lys-63-linked polyubiquitin chain formation. APC16 associates with APC/C independently of ANAPC2 and APC11.

REFERENCES

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- Cui, X.Y., et al. 2009. Identification of a novel gene, MSAG, regulated by high levels of glucose and Insulin. *Biochemistry* 74: 22-28.
- Zhang, Z., et al. 2010. The APC/C subunit Cdc16/Cut9 is a contiguous tetratricopeptide repeat superhelix with a homo-dimer interface similar to Cdc27. *EMBO J.* 29: 3733-3744.
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- Hutchins, J.R., et al. 2010. Systematic analysis of human protein complexes identifies chromosome segregation proteins. *Science* 328: 593-599.

CHROMOSOMAL LOCATION

Genetic locus: ANAPC16 (human) mapping to 10q22.1; Anapc16 (mouse) mapping to 10 B4.

SOURCE

APC16 (C-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of APC16 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-135450 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

APC16 (C-12) is recommended for detection of APC16 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

APC16 (C-12) is also recommended for detection of APC16 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for APC16 siRNA (h): sc-90685, APC16 siRNA (m): sc-142773, APC16 shRNA Plasmid (h): sc-90685-SH, APC16 shRNA Plasmid (m): sc-142773-SH, APC16 shRNA (h) Lentiviral Particles: sc-90685-V and APC16 shRNA (m) Lentiviral Particles: sc-142773-V.

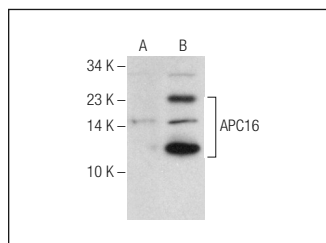
Molecular Weight of APC16: 12 kDa.

Positive Controls: APC16 (m): 293T Lysate: sc-119627 or APC16 (h): 293T Lysate: sc-111242.

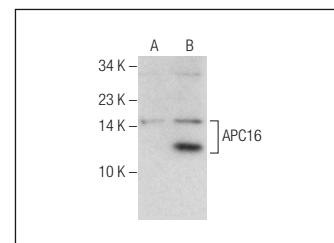
RECOMMENDED SECONDARY REAGENTS

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.

DATA



APC16 (C-12): sc-135450. Western blot analysis of APC16 expression in non-transfected: sc-117752 (A) and mouse APC16 transfected: sc-119627 (B) 293T whole cell lysates.



APC16 (C-12): sc-135450. Western blot analysis of APC16 expression in non-transfected: sc-117752 (A) and human APC16 transfected: sc-111242 (B) 293T whole cell lysates.

STORAGE

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

RESEARCH USE

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