

APC8 (S-17): sc-249944

BACKGROUND

Composed of more than ten subunits, the anaphase-promoting complex (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 APC and activate the cyclin-ubiquitination activity of APCs. In contrast, MAD2 inhibits APC by forming a ternary complex with CDC20 and APC and thus preventing APC activation. APC8, also referred to as CDC23, contains nine tetratricopeptide repeat (TPR) units. The TPR is a 34 amino acid sequence that is common to a variety of proteins and is significant because it forms scaffolds to mediate protein-protein interactions. The APC8 gene maps to human chromosome 5q31.2, within the smallest commonly deleted segment in myeloid leukemias.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: CDC23 (human) mapping to 5q31.2; Cdc23 (mouse) mapping to 18 B1.

SOURCE

APC8 (S-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of APC8 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-249944 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

APC8 (S-17) is recommended for detection of APC8 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other APC family members.

APC8 (S-17) is also recommended for detection of APC8 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for APC8 siRNA (h): sc-37530, APC8 siRNA (m): sc-37531, APC8 shRNA Plasmid (h): sc-37530-SH, APC8 shRNA Plasmid (m): sc-37531-SH, APC8 shRNA (h) Lentiviral Particles: sc-37530-V and APC8 shRNA (m) Lentiviral Particles: sc-37531-V.

Molecular Weight of APC8: 68 kDa.

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.

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.

PROTOCOLS

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