

#9499 Store at -20°C

APC6 (D8D8) Rabbit mAb


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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, IP	H M R Mk	Endogenous	72	Rabbit IgG	#Q13042	8881

Product Usage Information

Application

Western Blotting
Immunoprecipitation

Dilution

1:1000
1:100

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

Specificity / Sensitivity

APC6 (D8D8) Rabbit mAb recognizes endogenous levels of total APC6 protein. Based upon sequence alignment, this antibody is not predicted to cross-react with either APC8/CDC23 or APC3/CDC27.

Species predicted to react based on 100% sequence homology:

Bovine, Dog, Pig

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues near the carboxy terminus of human APC6 protein.

Background

Eukaryotic cell proliferation depends strictly upon the E3 ubiquitin ligase activity of the anaphase promoting complex/cyclosome (APC/C), whose main function is to trigger the transition of the cell cycle from metaphase to anaphase. The APC/C complex promotes the assembly of polyubiquitin chains on substrate proteins in order to target these proteins for degradation by the 26S proteasome (1,2). The vertebrate APC/C complex consists of as many as 15 subunits, including multiple scaffold proteins, two catalytic subunits (APC2, APC11), and a number of proteins responsible for substrate recognition (3). All E3 enzymes, including APC/C, utilize ubiquitin residues activated by E1 enzymes and transferred to E2 enzymes. Research studies indicate that APC/C interacts with the E2 enzymes UBE2S and UBE2C via the RING-finger domain-containing subunit APC11 (4-6). APC/C function relies on multiple cofactors, including an APC/C coactivator formed by the cell division control protein 20 homolog (CDC20) and Cdh1/FZR1. The CDC20/Cdh1 coactivator is responsible for recognition of APC/C substrates through interaction with specific D-box and KEN-box recognition elements within these substrates (7-9). Anaphase-promoting complex subunit 6 (APC6, CDC16) is a component of the tetratricopeptide repeat (TPR) sub-complex of the APC/C, which includes APC8/CDC23 and APC3/CDC27. This sub-complex may play an important role in the recruitment of the APC/C activators, CDC20 and Cdh1 (10). Additional evidence suggests that phosphorylation of APC6 and the other TPR subunits during mitosis plays a functional role in regulating the association between TPR subunits and substrate recognition subunits such as Cdc20 (11).

Background References

1. Qiao, X. et al. (2010) *Cell Cycle* 9, 3904-12.
2. Harper, J.W. et al. (2002) *Genes Dev* 16, 2179-206.
3. Chang, L. et al. (2014) *Nature* 513, 388-93.
4. Carroll, C.W. and Morgan, D.O. (2002) *Nat Cell Biol* 4, 880-7.
5. Gmachl, M. et al. (2000) *Proc Natl Acad Sci U S A* 97, 8973-8.
6. Leversson, J.D. et al. (2000) *Mol Biol Cell* 11, 2315-25.
7. Kraft, C. et al. (2005) *Mol Cell* 18, 543-53.
8. Glotzer, M. et al. (1991) *Nature* 349, 132-8.
9. Pfleger, C.M. and Kirschner, M.W. (2000) *Genes Dev* 14, 655-65.
10. Schreiber, A. et al. (2011) *Nature* 470, 227-32.
11. Kraft, C. et al. (2003) *EMBO J* 22, 6598-609.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

WB: Western Blotting **IP:** Immunoprecipitation

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster
X: Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse
GP: Guinea Pig **Rab:** rabbit **All:** all species expected

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