

#14807 Store at -20C

## APC10 Antibody



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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source:	UniProt ID:	Entrez-Gene Id:
WB	H M R Mk	Endogenous	24	Rabbit	#Q9UM13	10393

<b>Product Usage Information</b>	<b>Application</b> Western Blotting	<b>Dilution</b> 1:1000
<b>Storage</b>	Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. Do not aliquot the antibody.	
<b>Specificity / Sensitivity</b>	APC10 Antibody recognizes endogenous levels of total APC10 protein.	
<b>Species predicted to react based on 100% sequence homology:</b>	Chicken, Bovine, Pig	
<b>Source / Purification</b>	Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues near the amino terminus of human APC10 protein. Antibodies are purified by protein A and peptide affinity chromatography.	
<b>Background</b>	<p>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).</p> <p>Anaphase-promoting complex subunit 10 (APC10, DOC1) is a highly conserved, core component of the anaphase promoting complex/cyclosome (10,11). Research studies indicate that APC10 participates in substrate recognition by the APC/C (3,12,13).</p>	
<b>Background References</b>	<ol style="list-style-type: none"> <li>Qiao, X. et al. (2010) <i>Cell Cycle</i> 9, 3904-12.</li> <li>Harper, J.W. et al. (2002) <i>Genes Dev</i> 16, 2179-206.</li> <li>Chang, L. et al. (2014) <i>Nature</i> 513, 388-93.</li> <li>Carroll, C.W. and Morgan, D.O. (2002) <i>Nat Cell Biol</i> 4, 880-7.</li> <li>Gmachl, M. et al. (2000) <i>Proc Natl Acad Sci U S A</i> 97, 8973-8.</li> <li>Leverson, J.D. et al. (2000) <i>Mol Biol Cell</i> 11, 2315-25.</li> <li>Kraft, C. et al. (2005) <i>Mol Cell</i> 18, 543-53.</li> <li>Glotzer, M. et al. (1991) <i>Nature</i> 349, 132-8.</li> <li>Pfleger, C.M. and Kirschner, M.W. (2000) <i>Genes Dev</i> 14, 655-65.</li> <li>Kurasawa, Y. and Todokoro, K. (1999) <i>Oncogene</i> 18, 5131-7.</li> <li>Grossberger, R. et al. (1999) <i>J Biol Chem</i> 274, 14500-7.</li> <li>Carroll, C.W. et al. (2005) <i>Curr Biol</i> 15, 11-8.</li> <li>Passmore, L.A. et al. (2003) <i>EMBO J</i> 22, 786-96.</li> </ol>	

### 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

**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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