

# **Cdc34 Polyclonal Antibody**

Catalog # AP68986

# **Specification**

# **Cdc34 Polyclonal Antibody - Product Information**

Application WB
Primary Accession P49427

Reactivity Human, Mouse, Rat

Host Rabbit Clonality Polyclonal

# **Cdc34 Polyclonal Antibody - Additional Information**

Gene ID 997

## **Other Names**

CDC34; UBCH3; UBE2R1; Ubiquitin-conjugating enzyme E2 R1; Ubiquitin-conjugating enzyme E2-32 kDa complementing; Ubiquitin-conjugating enzyme E2-CDC34; Ubiquitin-protein ligase R1

#### Dilution

WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications.

## **Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

# **Storage Conditions**

-20°C

## **Cdc34 Polyclonal Antibody - Protein Information**

Name CDC34

Synonyms UBCH3, UBE2R1

## **Function**

E2 ubiquitin-conjugating enzyme that accepts ubiquitin from an E1 ubiquitin-activating protein, and catalyzes its covalent attachment to other proteins by an E3 ubiquitin-protein ligase complex (PubMed:<a href="http://www.uniprot.org/citations/10329681" target="\_blank">10329681</a>, PubMed:<a href="http://www.uniprot.org/citations/17588522" target="\_blank">17588522</a>, PubMed:<a href="http://www.uniprot.org/citations/20061386" target="\_blank">20061386</a>, PubMed:<a href="http://www.uniprot.org/citations/38326650" target="\_blank">38326650</a>). In vitro catalyzes 'Lys-48'-linked polyubiquitination (PubMed:<a

href="http://www.uniprot.org/citations/22496338" target="\_blank">22496338</a>). Cooperates with the E2 UBCH5C and the SCF(FBXW11) E3 ligase complex for the polyubiquitination of NFKBIA leading to its subsequent proteasomal degradation (PubMed:<a

 $href="http://www.uniprot.org/citations/10329681" target="\_blank">10329681</a>, PubMed:<a href="http://www.uniprot.org/citations/10918611" target="\_blank">10918611</a>, PubMed:<a href="http://www.uniprot.org/citations/17698585" target="\_blank">17698585</a>). Performs$ 



ubiquitin chain elongation building ubiquitin chains from the UBE2D3-primed NFKBIA-linked ubiquitin. UBE2D3 acts as an initiator E2, priming the phosphorylated NFKBIA target at positions 'Lys-21' and/or 'Lys-22' with a monoubiquitin. Cooperates with the SCF(SKP2) E3 ligase complex to regulate cell proliferation through ubiquitination and degradation of MYBL2 and KIP1 (PubMed: <a href="http://www.uniprot.org/citations/10871850" target=" blank">10871850</a>, PubMed:<a href="http://www.uniprot.org/citations/15652359" target="blank">15652359</a>, PubMed:<a href="http://www.uniprot.org/citations/19112177" target="\_blank">19112177</a>). Involved in ubiquitin conjugation and degradation of CREM isoform ICERIIgamma and ATF15 resulting in abrogation of ICERIIgamma- and ATF5-mediated repression of cAMP-induced transcription during both meiotic and mitotic cell cycles. Involved in the regulation of the cell cycle G2/M phase through its targeting of the WEE1 kinase for ubiquitination and degradation (PubMed:<a href="http://www.uniprot.org/citations/19126550" target=" blank">19126550</a>). Also involved in the degradation of beta-catenin (PubMed:<a href="http://www.uniprot.org/citations/12037680" target=" blank">12037680</a>). Is target of human herpes virus 1 protein ICPO, leading to ICPO-dependent dynamic interaction with proteasomes (PubMed: <a href="http://www.uniprot.org/citations/11805320" target=" blank">11805320</a>, PubMed:<a href="http://www.uniprot.org/citations/12060736" target="blank">12060736</a>).

### **Cellular Location**

Cytoplasm. Nucleus. Note=The phosphorylation of the C-terminal tail plays an important role in mediating nuclear localization. Colocalizes with beta-tubulin on mitotic spindles in anaphase

### **Tissue Location**

Expressed in testes during spermatogenesis to regulate repression of cAMP-induced transcription

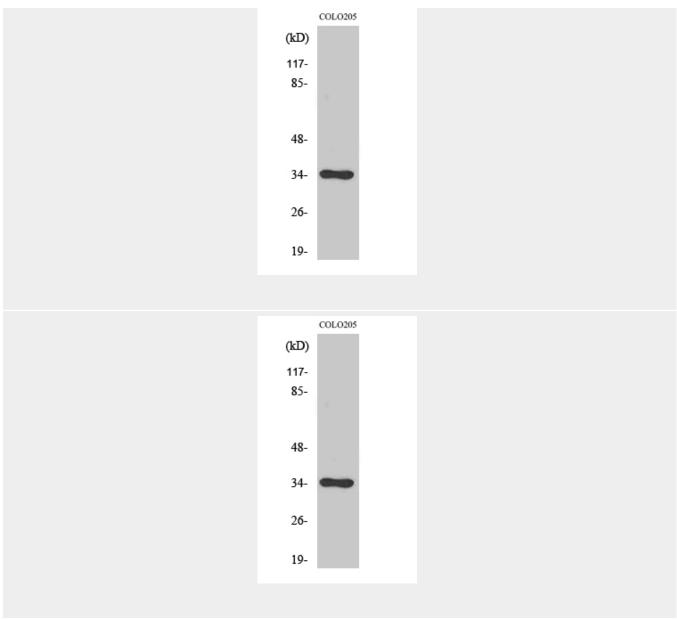
# Cdc34 Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# Cdc34 Polyclonal Antibody - Images





Cdc34 Polyclonal Antibody - Background

Accepts ubiquitin from the E1 complex and catalyzes its covalent attachment to other proteins. In vitro catalyzes 'Lys- 48'-linked polyubiquitination (PubMed:22496338). Cooperates with the E2 UBCH5C and the SCF(FBXW11) E3 ligase complex for the polyubiquitination of NFKBIA leading to its subsequent proteasomal degradation. Performs ubiquitin chain elongation building ubiquitin chains from the UBE2D3-primed NFKBIA-linked ubiquitin. UBE2D3 acts as an initiator E2, priming the phosphorylated NFKBIA target at positions 'Lys-21' and/or 'Lys-22' with a monoubiquitin. Cooperates with the SCF(SKP2) E3 ligase complex to regulate cell proliferation through ubiquitination and degradation of MYBL2 and KIP1. Involved in ubiquitin conjugation and degradation of CREM isoform ICERIIgamma and ATF15 resulting in abrogation of ICERIIgamma- and ATF5-mediated repression of cAMP-induced transcription during both meiotic and mitotic cell cycles. Involved in the regulation of the cell cycle G2/M phase through its targeting of the WEE1 kinase for ubiquitination and degradation. Also involved in the degradation of beta-catenin. Is target of human herpes virus 1 protein ICPO, leading to ICPO- dependent dynamic interaction with proteasomes (PubMed:10329681, PubMed:10373550, PubMed:10871850, PubMed:11675391, PubMed:12037680, PubMed:15652359, PubMed:17461777, PubMed:17698585, PubMed:19112177, PubMed:19126550, PubMed:19945379, PubMed:20061386, PubMed:20347421).