

## **CDC34 Antibody**

Rabbit mAb Catalog # AP90955

## **Specification**

## **CDC34 Antibody - Product Information**

Application WB, FC, ICC, IP

Primary Accession P49427
Reactivity Rat

Clonality Monoclonal

**Other Names** 

CDC34; Cell division cycle 34; UBC3; UBCH3; Ubiquitin-protein ligase R1; UBE2R1; E2-CDC34;

Ubiquitin carrier protein;

Isotype Rabbit IgG
Host Rabbit
Calculated MW 26737 Da

# **CDC34 Antibody - Additional Information**

Dilution WB~~1:1000

FC~~1:10~50 ICC~~N/A IP~~N/A

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human

CDC34

Description 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.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline ,

pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid

freeze / thaw cycle.

# **CDC34 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

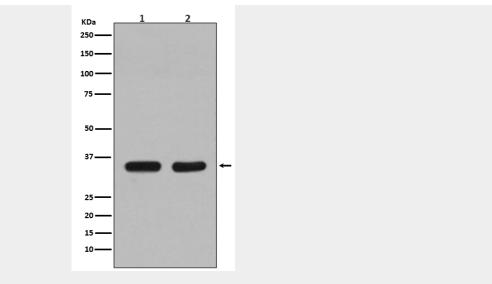
## **CDC34 Antibody - Protocols**

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

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

# CDC34 Antibody - Images





Western blot analysis of CDC34 expression in (1) Jurkat cell lysate; (2) NIH/3T3 cell lysate.