

CDC34 Rabbit mAb

Catalog # AP76432

Product Information

| | |
|--------------------------|------------------------|
| Application | WB, FC, IP |
| Primary Accession | P49427 |
| Reactivity | Rat, Human, Mouse |
| Host | Rabbit |
| Clonality | Monoclonal Antibody |
| Isotype | IgG |
| Conjugate | Unconjugated |
| Purification | Affinity Purified |
| Calculated MW | 26737 |

Additional Information

| | |
|--------------------|---|
| Gene ID | 997 |
| Other Names | CDC34 |
| Dilution | WB~~1:500-1:1000 FC~~1:50-1:100 IP~~1:20-1:50 |
| Format | Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA. |
| Storage | Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles. |

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: 10329681 , PubMed: 17588522 , PubMed: 20061386 , PubMed: 38326650). 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 (PubMed: 10329681 , PubMed: 10918611 , PubMed: 17698585). 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(SK2P2) E3 ligase complex to regulate cell proliferation through ubiquitination and degradation of MYBL2 and KIP1 |

(PubMed:[10871850](#), PubMed:[15652359](#), PubMed:[19112177](#)). 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:[19126550](#)). Also involved in the degradation of beta-catenin (PubMed:[12037680](#)). Is target of human herpes virus 1 protein ICP0, leading to ICP0-dependent dynamic interaction with proteasomes (PubMed:[11805320](#), PubMed:[12060736](#)).

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

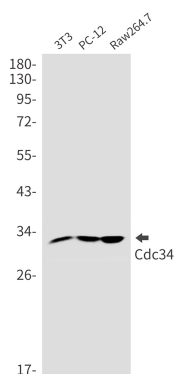
Tissue Location

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

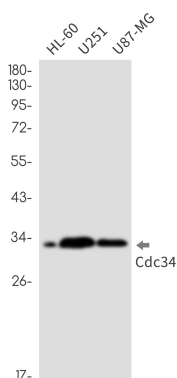
Background

The protein encoded by this gene is a member of the ubiquitin-conjugating enzyme family. Ubiquitin-conjugating enzyme catalyzes the covalent attachment of ubiquitin to other proteins. This protein is a part of the large multiprotein complex, which is required for ubiquitin-mediated degradation of cell cycle G1 regulators, and for the initiation of DNA replication.

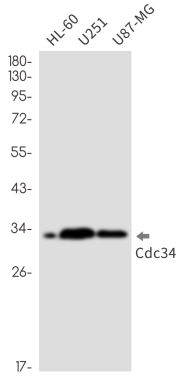
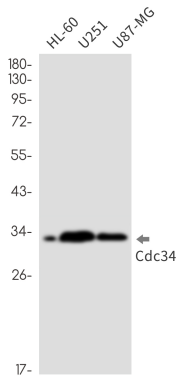
Images



Western blot analysis of Cdc34 in 3T3, PC-12, Raw264.7 lysates using CDC34 antibody.



Western blot analysis of Cdc34 in HL-60, U251, U87-MG lysates using Cdc34 antibody.



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