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CDC34 Antibody

Rabbit mAb
Catalog # AP90955

Product Information

Application	WB, IF, FC, ICC, IP
Primary Accession	P49427
Reactivity	Rat, Human, Mouse
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

Additional Information

Dilution	WB 1:500~1:2000 ICC/IF 1:50~1:200 IP 1:50 FC 1:50
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.

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(SKP2) 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).

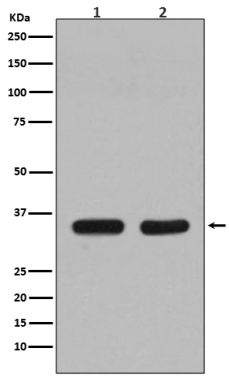
Cellular Location

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

Images



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

Image not found : 202311/AP90955-IF.jpg

Immunofluorescent analysis of Hela cells, using CDC34 Antibody.