10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-CDC34 Antibody

Rabbit polyclonal antibody to CDC34
Catalog # AP59507

Product Information

Application	WB
Primary Accession	P49427
Other Accession	Q8CFI2
Reactivity	Human, Mouse, Rat, Monkey
Host	Rabbit
Clonality	Polyclonal
Calculated MW	26737

Additional Information

Gene ID	997
Other Names	UBCH3; UBE2R1; Ubiquitin-conjugating enzyme E2 R1; Ubiquitin-conjugating enzyme E2-32 kDa complementing; Ubiquitin-conjugating enzyme E2-CDC34; Ubiquitin-protein ligase R1
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human CDC34. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000)
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

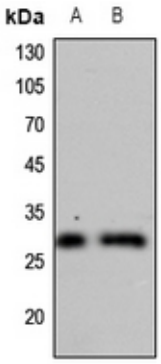
Name	CDC34
Synonyms	UBCH3, UBE2R1
Function	E2 ubiquitin-conjugating enzyme that accepts ubiquitin from an E1 ubiquitin-activating protein, and catalyzes its covalent attachment to other proteins by an E3 ubiquitin-protein ligase complex (PubMed:10329681, PubMed:17588522, PubMed:20061386, PubMed:38326650). 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

Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human CDC34. The exact sequence is proprietary.

Images



Western blot analysis of CDC34 expression in mouse lung (A), mouse liver (B) whole cell lysates.