

Summary

Production Name	Ubiquitin Conjugating Enzyme E2 D3 Rabbit Monoclonal Antibody	
Description	Recombinant Rabbit Monoclonal antibody	
Host	Rabbit	
Application	WB,IP	
Reactivity	Human,Mouse,Rat	

Performance

Conjugation	Unconjugated
Modification	Unmodified
lsotype	IgG
Clonality	Monoclonal Antibody
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw
	cycles.
Buffer	50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05%
	BSA
Purification	Affinity Purified

Immunogen

Gene Name	UBE2D3	
Alternative Names	ubiquitin conjugating enzyme E2D 3; UBC4/5; UBCH5C; E2(17)K	
Gene ID	7323	
SwissProt ID	P61077	

Application

Dilution Ratio	WB: 1/500-1/1000 IP: 1/20
Molecular Weight	Calculated MW: 17 kDa; Observed MW: 17 kDa



Background

Accepts ubiquitin from the E1 complex and catalyzes its covalent attachment to other proteins. In vitro catalyzes 'Lys-11'-, as well as 'Lys-48'-linked polyubiquitination. Cooperates with the E2 CDC34 and the SCF(FBXW11) E3 ligase complex for the polyubiquitination of NFKBIA leading to its subsequent proteasomal degradation. Acts as an initiator E2, priming the phosphorylated NFKBIA target at positions 'Lys-21' and/or 'Lys-22' with a monoubiquitin. Ubiquitin chain elongation is then performed by CDC34, building ubiquitin chains from the UBE2D3-primed NFKBIA-linked ubiquitin. Acts also as an initiator E2, in conjunction with RNF8, for the priming of PCNA. Monoubiquitination of PCNA, and its subsequent polyubiquitination, are essential events in the operation of the DNA damage tolerance (DDT) pathway that is activated after DNA damage caused by UV or chemical agents during S-phase. Associates with the BRCA1/BARD1 E3 ligase complex to perform ubiquitination at DNA damage sites following ionizing radiation leading to DNA repair. Targets DAPK3 for ubiquitination which influences promyelocytic leukemia protein nuclear body (PML-NB) formation in the nucleus. In conjunction with the MDM2 and TOPORS E3 ligases, functions ubiquitination of p53/TP53. Supports NRDP1-mediated ubiquitination and degradation of ERBB3 and of BRUCE which triggers apoptosis. In conjunction with the CBL E3 ligase, targets EGFR for polyubiquitination at the plasma membrane as well as during its internalization and transport on endosomes. In conjunction with the STUB1 E3 quality control E3 ligase, ubiquitinates unfolded proteins to catalyze their immediate destruction.

Research Area

Epigenetics and Nuclear Signaling

Image Data



Western blot analysis of UBE2D3 in K562, rat Brain, C6, 3T3, Hela lysates using Ubiquitin Conjugating Enzyme E2 D3 antibody.

Note For research use only.

