



COP1 rabbit pAb

Cat#: orb770038 (Manual)

For research use only. Not intended for diagnostic use.

Product Name COP1 rabbit pAb

Host species Rabbit

Applications WB;ELISA

Species Cross-Reactivity Human; Mouse

Recommended dilutions Western Blot: 1/500 - 1/2000. ELISA: 1/20000. Not yet tested in other

applications.

Immunogen The antiserum was produced against synthesized peptide derived from

human RFWD2. AA range:661-710

Specificity COP1 Polyclonal Antibody detects endogenous levels of COP1 protein.

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium

azide..

Storage Store at -20°C. Avoid repeated freeze-thaw cycles.

Protein Name E3 ubiquitin-protein ligase RFWD2

Gene Name RFWD2

Cellular localization Nucleus speckle. Cytoplasm. In the nucleus, it forms nuclear speckles.

Purification The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Clonality Polyclonal





Concentration 1 mg/ml

Observed band 80kD

Human Gene ID 64326

Human Swiss-Prot Number Q8NHY2

RFWD2; COP1; RNF200; E3 ubiquitin-protein ligase RFWD2; Constitutive photomorphogenesis protein 1 homolog; hCOP1; RING finger and WD **Alternative Names**

repeat domain protein 2; RING finger protein 200

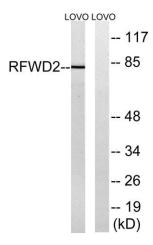
Background

domain: The RING finger domain, in addition to its role in ubiquitination, functions as a structural scaffold to bring two clusters of positive-charged residues within spatial proximity to mimic a bipartite nuclear localization signal (NLS), function: E3 ubiquitin-protein ligase that mediates ubiquitination and subsequent proteasomal degradation of target proteins. E3 ubiquitin ligases accept ubiquitin from an E2 ubiquitin-conjugating enzyme in the form of a thioester and then directly transfers the ubiquitin to targeted substrates. Involved in JUN ubiquitination and degradation. Directly involved in p53 (TP53) ubiquitination and degradation, thereby abolishing p53-dependent transcription and apoptosis. Ubiquitinates p53 independently of MDM2 or RCHY1. Probably mediates E3 ubiquitin ligase activity by functioning as the essential RING domain subunit of larger E3 complexes. In contrast, it does not constitute the catalytic RING subunit in the DCX DET1-COP1 complex that negatively regulates JUN, the ubiquitin ligase activity being mediated by RBX1.,induction:By p53/TP53.,pathway:Protein modification; protein ubiquitination., similarity: Belongs to the COP1 family.,similarity:Contains 1 RING-type zinc finger.,similarity:Contains 7 WD repeats.,subcellular location:In the nucleus, it forms nuclear speckles., subunit: Homodimer. Homodimerization is mediated by the coiled coil domain. Component of the DCX DET1-COP1 ubiquitin ligase complex at least composed of RBX1, DET1, DDB1, CUL4A and COP1. Isoform 2 does not interact with CUL4A but still binds to RBX1, suggesting that the interaction may be mediated by another culllin protein. Isoform 1 and isoform 2 interact with CUL5 but not with CUL1, CUL2 not CUL3. Interacts with bZIP transcription factors JUN, JUNB and JUND but not with FOS, ATF2 nor XBP1. Interacts with p53 (TP53), tissue specificity: Ubiquitously expressed at low level. Expressed at higher level in testis, placenta, skeletal muscle and heart.,

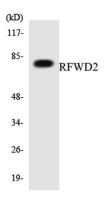




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Western blot analysis of lysates from LOVO cells, using RFWD2 Antibody. The lane on the right is blocked with the synthesized peptide.



Western blot analysis of the lysates from HepG2 cells using RFWD2 antibody.