



# COP1 (phospho Ser387) Polyclonal Antibody

|                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Catalog No</b>                  | YP-Ab-00180                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Isotype</b>                     | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Reactivity</b>                  | Human;Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Applications</b>                | WB;ELISA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Gene Name</b>                   | RFWD2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Immunogen</b>                   | The antiserum was produced against synthesized peptide derived from human RFWD2 around the phosphorylation site of Ser387. AA range:353-402                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Specificity</b>                 | Phospho-COP1 (S387) Polyclonal Antibody detects endogenous levels of COP1 protein only when phosphorylated at S387.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Formulation</b>                 | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Source</b>                      | Polyclonal, Rabbit,IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Purification</b>                | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Dilution</b>                    | Western Blot: 1/500 - 1/2000. ELISA: 1/5000. Not yet tested in other applications.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Concentration</b>               | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Purity</b>                      | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Storage Stability</b>           | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Synonyms</b>                    | COP1;RFWD2;E3 ubiquitin-protein ligase RFWD2;RNF200;Constitutive photomorphogenesis protein 1 homolog;hCOP1;RING finger and WD repeat domain protein 2;RING finger protein 200                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Observed Band</b>               | 100kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Calculated Molecular Weight</b> | 100kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Cell Pathway</b>                | Nucleus speckle. Cytoplasm. In the nucleus, it forms nuclear speckles.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Tissue Specificity</b>          | Ubiquitously expressed at low level. Expressed at higher level in testis, placenta, skeletal muscle and heart.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Function</b>                    | 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

## 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 cullin 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.,

## matters needing attention

Avoid repeated freezing and thawing!

## Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

## Products Images

Western blot analysis of lysates from K562 cells treated with UV 15', using RFWD2 (Phospho-Ser387) Antibody. The lane on the right is blocked with the phospho peptide.