

## Immunotag™ COP1 Polyclonal Antibody

| Antibody Specification |   |
|------------------------|---|
| Catalog No.            | ITT1059   |
| Product Description    | Immunotag™ COP1 Polyclonal Antibody   |
| Size                   | 50 µg, 100 µg   |
| Conjugation            | HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647   |
| IMPORTANT NOTE         | This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.                    |
| Target Protein         | COP1  |
| Clonality              | Polyclonal  |
| Storage/Stability      | -20°C/1 year  |
| Application            | WB,ELISA  |
| Recommended Dilution   | Western Blot: 1/500 - 1/2000. ELISA: 1/20000. Not yet tested in other applications.   |
| Concentration          | 1 mg/ml   |
| Reactive Species       | Human,Mouse   |
| Host Species           | Rabbit  |
| 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.   |
| Purification           | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen  |
| Form                   | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.   |
| Gene Name              | RFWD2   |
| Accession No.          | Q8NHY2 Q9R1A8   |
| Alternate Names        | RFWD2; COP1; RNF200; E3 ubiquitin-protein ligase RFWD2; Constitutive photomorphogenesis protein 1 homolog; hCOP1; RING finger and WD repeat domain protein 2; RING finger protein 200 |

## Antibody Specification

|                             |  |
|-----------------------------|--|
| Description                 | <p>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.,</p> |
| Cell Pathway/<br>Category   | p53,Ubiquitin mediated proteolysis,  |
| Protein<br>Expression       | Hepatoma,Spleen,Testis,  |
| Subcellular<br>Localization | Golgi membrane,nucleoplasm,cytoplasm,centrosome,cytosol,focal adhesion,integral component of membrane,nuclear speck,   |

## Antibody Specification

|                  |  |
|------------------|--|
| Protein Function | <p>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.,</p> |
| Usage            | For Research Use Only! Not for diagnostic or therapeutic procedures.   |