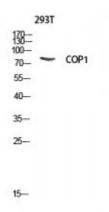


## **Anti-COP1** antibody





**Description** Rabbit polyclonal to COP1.

Model STJ92423

**Host** Rabbit

**Reactivity** Human, Mouse

**Applications** ELISA, WB

**Immunogen** Synthesized peptide derived from human COP1 around the non-

phosphorylation site of S387.

**Immunogen Region** 330-410 aa

**Gene ID** <u>64326</u>

Gene Symbol RFWD2

**Dilution range** WB 1:500-1:2000ELISA 1:40000

**Specificity** COP1 Polyclonal Antibody detects endogenous levels of COP1 protein.

**Tissue Specificity** Ubiquitously expressed at low level. Expressed at higher level in testis,

placenta, skeletal muscle and heart.

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

chromatography using epitope-specific immunogen.

**Note** For Research Use Only (RUO).

Protein Name E3 ubiquitin-protein ligase RFWD2 Constitutive photomorphogenesis protein

1 homolog hCOP1 RING finger and WD repeat domain protein 2 RING

finger protein 200 RING-type E3 ubiquitin transferase RFWD2

Molecular Weight 110 kDa

**Clonality** Polyclonal

**Conjugation** Unconjugated

**Isotype** IgG

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

**Concentration** 1 mg/ml

**Storage Instruction** Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links HGNC:17440OMIM:608067

Alternative Names E3 ubiquitin-protein ligase RFWD2 Constitutive photomorphogenesis protein

1 homolog hCOP1 RING finger and WD repeat domain protein 2 RING

finger protein 200 RING-type E3 ubiquitin transferase RFWD2

**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. Involved in 14-3-3 protein sigma/SFN ubiquitination and proteasomal degradation, leading to AKT activation and promotion of cell survival.

Ubiquitinates MTA1 leading to its proteasomal degradation. Upon binding to TRIB1, ubiquitinates CEBPA, which lacks a canonical COP1-binding motif

(Probable).

Sequence and Domain Family 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). The WD40 domain (386-731) is necessary and sufficient for TRIB1 binding.

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

**Post-translational** Autoubiquitinated. MTA1 destabilizes it by promoting its autoubiquitination.

Modifications