

# Rabbit Anti-phospho-COP1 (Ser387) antibody

## SL13976R

Product Name:	phospho-COP1 (Ser387)
Chinese Name:	磷酸化E3Ubiquitin蛋白连接酶COP1抗体
Alias:	COP1 (phospho S387); p-COP1 (phospho S387); Constitutive photomorphogenesis protein 1 homolog; COP; E3 ubiquitin-protein ligase RFWD2; hCOP1; RFWD2; RFWD2_HUMAN; RNF200; ring finger and WD repeat domain 2; RING finger and WD repeat domain protein 2; RING finger protein 200.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Cow, Horse, Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	80kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthesised phosphopeptide derived from human COP1 around the phosphorylation site of Ser387:TA(p-S)QL
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	COP1 is an E3 ubiquitin ligase protein that mediates ubiquitination and degradation of target proteins such as c-Jun and p53. It is a component of the DCX DET1-COP1

ubiquitin ligase complex which consists of RBX1, DET1, DDB1, CUL4A and COP1. Localizing to the cytoplasm and to the nucleus, COP1 is primarily expressed in testis, placenta, heart and skeletal muscle. COP1 is a potent inhibitor of p53-dependent transcription and apoptosis but, when phosphorylated by Atm (ataxia telangiectasia mutated) in response to DNA damage, the COP1-p53 complex is disrupted and p53 is allowed to exert its pro-apoptotic properties. In ovarian and breast cancers, COP1 is overexpressed, suggesting a role for COP1 in tumorigenesis.

#### **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.

### **Subcellular Location:**

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

## Tissue Specificity:

Ubiquitously expressed at low level. Expressed at higher level in testis, placenta, skeletal muscle and heart.

## Similarity:

Belongs to the COP1 family. Contains 1 RING-type zinc finger. Contains 7 WD repeats.

SWISS: O8NHY2

**Gene ID:** 64326

#### Database links:

Entrez Gene: 64326 Human

Entrez Gene: 26374 Mouse

Omim: 608067 Human

SwissProt: Q8NHY2 Human

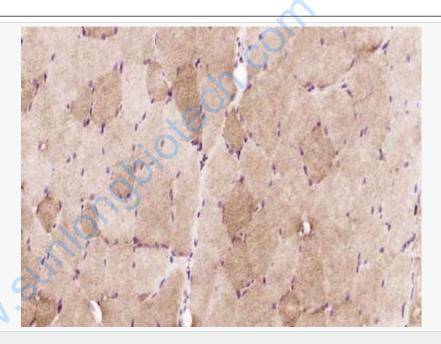
SwissProt: Q9R1A8 Mouse

Unigene: 523744 Human

Unigene: 328135 Mouse

## **Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



## Picture:

Paraformaldehyde-fixed, paraffin embedded (Rat skeletal muscle); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (phospho-COP1 (Ser387)) Polyclonal Antibody, Unconjugated (SL13976R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.