

## **Product datasheet for TR309858**

## OriGene Technologies, Inc.

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## **COP1 (RFWD2) Human shRNA Plasmid Kit (Locus ID 64326)**

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** COP1 (RFWD2) Human shRNA Plasmid Kit (Locus ID 64326)

**Locus ID:** 64326

Synonyms: CFAP78; FAP78; RFWD2; RNF200

**Vector:** pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format:

Retroviral plasmids

Components: RFWD2 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

64326). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

RefSeq: NM 001001740, NM 001286644, NM 022457, NM 022457.1, NM 022457.2, NM 022457.3,

NM 022457.4, NM 022457.5, NM 022457.6, NM 001001740.1, NM 001001740.2, NM 001001740.3, NM 001286644.1, BC094728, BC020845, BC039723, NM 022457.7

UniProt ID: Q8NHY2

**Summary:** 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).[UniProtKB/Swiss-Prot Function]





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shRNA Design:

These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact <a href="mailto:techsupport@origene.com">techsupport@origene.com</a>. If you need a special design or shRNA sequence, please utilize our <a href="mailto:custom shRNA service">custom shRNA service</a>.

Performance Guaranteed: OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).