

Product datasheet for R1520

OriGene Technologies, Inc.

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Os04g0627000 (C-term) Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: ELISA, IP, WB

Recommended Dilution: This antibody reacts with human ROC2 by Western blot (1:500-1:1,000) and

Immunoprecipitation. The antibody immunoprecipitates in vitro translated protein and

protein from overexpressing cell lysates (using HeLa and NIH-3T3, and others).

Coimmunoprecipitation of related proteins does occur. A 12.6 kDa band corresponding to

human ROC2 is detected.

Most cell lines expressing ROC2 can be used as a positive control.

Reactivity: C. elegans, Human, Mouse, Zebrafish

Host: Rabbit

Clonality: Polyclonal

Immunogen: Prepared from whole rabbit serum produced by repeated immunizations with a synthetic

peptide corresponding to amino acids 102-113 of Human ROC2 (C-terminal) coupled to KLH.

Specificity: This product is monospecific antiserum processed by delipidation and defibrination followed

by sterile filtration.

This product reacts with human, mouse, C.elgans and zebra fish ROC2. Cross reactivity may also occur with ROC2 from other sources. Sufficient sequence differences exist to suggest that this antibody would not react with other RING box proteins such as ROC1 and APC11.

Formulation: State: Serum

State: Liquid (sterile filtered) with 0.01% (w/v) Sodium Azide as preservative.

Concentration: lot specific

Purification: Delipidation and defibrination.

Conjugation: Unconjugated

Storage: Store vial at -20°C prior to opening. Aliquot contents and freeze at -20°C or below for

extended storage. Centrifuge product if not completely clear after standing at room

temperature. This product is stable for one month at 2-8°C as an undiluted liquid. Dilute only

prior to immediate use.

Avoid cycles of freezing and thawing.

Stability: Shelf life: one year from despatch.





Database Link: Q0|9X2

Background: ROC1 also known as RING-box protein 2, Rbx2, RING finger protein 7, Regulator of cullins 2,

CKII betabinding protein 1, and CKBBP1, is a probable component of the SCF (SKP1-CUL1-F-box protein) and the CBC(VHL) (CUL2-elonging BC-VHL) E3 ubiquitin ligase complexes, which mediate the ubiquitination and subsequent proteasomal degradation of target proteins involved in cell cycle progression, signal transduction and transcription. ROC2 appears to recruit the E2 ubiquitination enzyme through the RING-type zinc finger in a manner similar to CDC34, and brings it into close proximity to the substrate. ROC2 may play a role in protecting cells from apoptosis induced by redox agents. ROC2 has a cytoplasmic and nuclear localization and is expressed in heart, liver, skeletal muscle and pancreas tissues, and at very low levels in brain, placenta and lung. 1,10-phenanthroline induces ROC2 expression. The RING-type zinc finger domain is essential for ubiquitin ligase activity. Phosphorylation by CK2

is required for efficient degradation of NFKBIA and CDKN1B.

Synonyms: GL2-2

Product images:

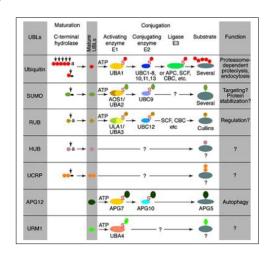


Figure 1. Conjugation pathways for ubiquitin and ubiquitin-like modifiers (UBLs). Most modifiers mature by proteolytic processing from inactive precursors (a; amino acid). Arrowheads point to the cleavage sites. Ubiquitin is expressed either as polyubiquitin or as a fusion with ribosomal proteins. Conjugation requires activating (E1) and conjugating (E2) enzymes that form thiolesters (S) with the modifiers. Modification of cullins by RUB involves SCF (SKP1/cullin-1/F-box protein) /CBC (cullin-2/elongin B/elonginC) -like E3 enzymes that are also involved in ubiquitination. In contrast to ubiquitin, the UBLs do not seem to form multi-UBL chains. UCRP (ISG15) resembles two ubiquitin moieties linked headto-tail. Whether HUB1 functions as a modifier is currently unclear. APG12 and URM1 are distinct from the other modifiers because they are unrelated in sequence to ubiquitin. Data contributed by S.Jentsch, see references above.