Anti-ROC2 (C-terminal specific) (RABBIT) Antibody - 100-401-A14

Code: 100-401-A14 **Size:** 100 µL

Product Description: Anti-ROC2 (C-terminal specific) (RABBIT) Antibody - 100-401-A14

Concentration: 85 mg/mL by Refractometry

PhysicalState: Liquid (sterile filtered)

Label	Unconjugated
Host	Rabbit
Gene Name	RNF7
Species Reactivity	human
Buffer	None
Stabilizer	None
Preservative	0.01% (w/v) Sodium Azide
Storage Condition	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Synonyms	GTP binding protein Roc2 antibody, Ras like protein expressed in neurons antibody, Ras like without CAAX 2 antibody, Ras like without CAAX protein 2 antibody, RIBA antibody, Ric (Drosophila) like antibody, Ric like antibody, RIN antibody
Application Note	This antibody reacts with human ROC2 by western blot 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. Researchers should determine optimal titers for other applications.
Background	ROC2 also known as RING-box protein 2, Rbx2, RING finger protein 7, Regulator of cullins 2, CKII beta-binding protein 1, and CKBBP1, is a probable component of the SCF (SKP1-CUL1-F-box protein) 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.
Purity And 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.
Assay Dilutions	User Optimized
ELISA	1:2,000 - 1:10,000
Immunohistochemistry	User Optimized
WESTERN BLOT	1:500 - 1:1,000
IHC	User Optimized
OTHER ASSAYS	User Optimized
Expiration	Expiration date is one (1) year from date of opening.
Immunogen	This antibody was 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.
General Reference	Jentsch S, Pyrowolakis G. (2000) Ubiquitin and its kin: how close are the family ties? Trends Cell Biol. 10(8):335-42. Son,M.Y., Park,J.W., Kim,Y.S., Kang,S.W., Marshak,D.R., Park,W. and Bae,Y.S. (1999) Protein kinase CKII

interacts with and phosphorylates the SAG protein containing ring-H2 finger motif. Biochem. Biophys. Res. Commun. 263 (3), 743-748.

Duan,H., Wang,Y., Aviram,M., Swaroop,M., Loo,J.A., Bian,J., Tian,Y., Mueller,T., Bisgaier,C.L. and Sun,Y. (1999) SAG, a novel zinc RING finger protein that protects cells from apoptosis induced by redox agents. Mol. Cell. Biol. 19 (4), 3145-3155.

Related Products

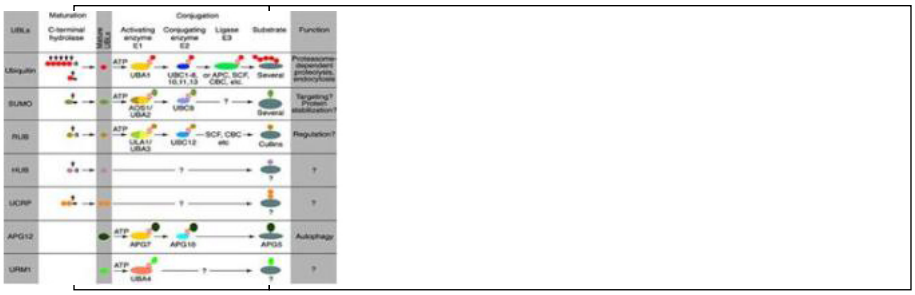
100-401-A01	Anti-Cul1 (C-terminal specific) [RABBIT) Antibody - 100-401-A01
100-401-A02	Anti-Cul2 (C-terminal specific) [RABBIT) Antibody - 100-401-A02
100-401-A03	Anti-Cul3 (N-terminal specific) [RABBIT) Antibody - 100-401-A03
100-401-A04	Anti-Cul4A (N-terminal specific) [RABBIT) Antibody - 100-401-A04

Related Links

UniProtKB - Q9UBF6	http://www.uniprot.org/uniprot/Q9UBF6
NCBI - 37538003	http://www.ncbi.nlm.nih.gov/protein/37538003
GeneID - 9616	http://www.ncbi.nlm.nih.gov/gene/9616

Images

1	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 head-to-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.



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