

Datasheet for 100-401-A08**SKP1 Antibody****Overview**

Description:	Anti-SKP1 (C-terminal specific) (RABBIT) Antibody - 100-401-A08
Item No.:	100-401-A08
Size:	100 µL
Applications:	IP, WB
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	SKP1 is also known as S-phase kinase-associated protein 1A, Cyclin A/CDK2-associated protein p19, p19A, p19skp1, RNA polymerase II elongation factor-like protein, Organ of Corti protein 2, OCP-II protein, OCP-2, Transcription elongation factor B, and SIII. SKP1 is an essential component of the SCF (SKP1-CUL1-F-box protein) ubiquitin ligase complex, which mediates the ubiquitination of proteins involved in cell cycle progression, signal transduction and transcription. In the SCF complex, SKP1 serves as an adapter that links the F-box protein to CUL1. SKP1 interacts directly with CUL1 and F-box proteins, such as BTTRC and SKP2, in the SCF complex. SKP1 also interacts with FBX29 and the cyclin A/CDK2 complex. SKP1 is part of a SCF-like complex consisting of CUL7, RBX1, SKP1 and FBXW8 and is also a component of a E3 ubiquitin ligase complex containing UBE2D1, SIAH1, CACYBP/SIP, SKP1A, APC and TBL1X.
Synonyms:	rabbit anti-SKP1 Antibody, Cyclin A/CDK2 associated protein p19 antibody, EMC 19 antibody, OCP 2 antibody, p19skp1 antibody, RNA polymerase II elongation factor like protein antibody, S phase kinase associated protein 1 antibody
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	Antiserum

Target Details

Gene Name:	SKP1
Reactivity:	Human

Immunogen Type:	Conjugated Peptide
Immunogen:	This antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to amino acids 152-163 of Human SKP1 (C-terminus) coupled to KLH.
Purity/Specificity:	This product is monospecific antiserum processed by delipidation and defibrination followed by sterile filtration. This product reacts with human SKP1. Cross reactivity is expected against mouse SKP1 based on a high degree of sequence homology. Cross reactivity with other SKP1 proteins or SKP1 from other sources is not known.
Relevant Links:	• UniProtKB - P63208 • NCBI - 52783797 • GenelD - 6500

Application Details

Suggested Applications:	IP, WB (Based on references)
Application Note:	This antibody reacts with human SKP1 by western blot and immunoprecipitation. The antibody immunoprecipitates in vitro translated protein and protein from cell lysates (using HeLa, NIH-3T3, and others). Coimmunoprecipitation of cyclin A and Cdc2 may occur. An 18.5 kDa band corresponding to human SKP1 is detected. Most cell lines expressing SKP1 can be used as a positive control. Researchers should determine optimal titers for other applications.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:2,000 - 1:10,000
IHC:	User Optimized
WB:	1:500 - 1:1,000

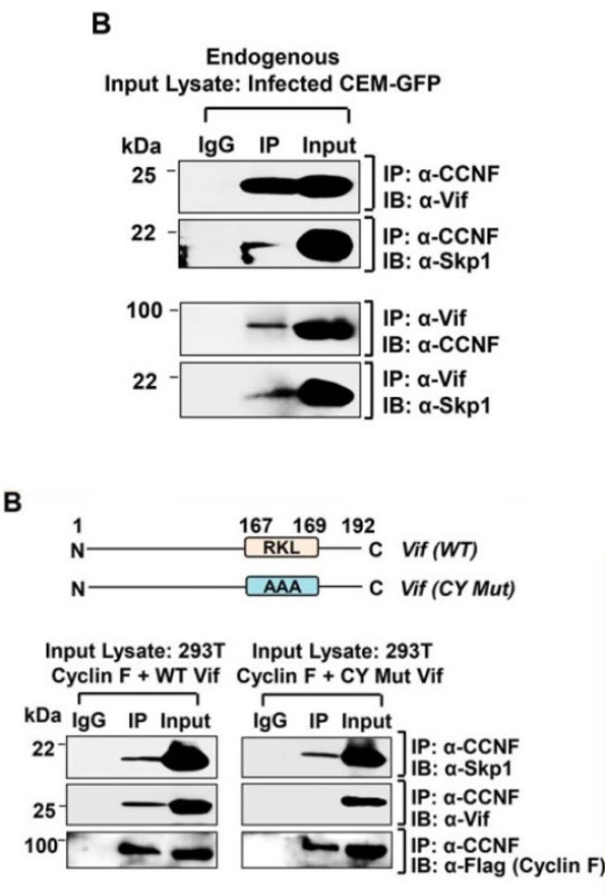
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	85 mg/mL by Refractometry
Buffer:	None
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

Shipping Condition:	Dry Ice
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.
Expiration:	Expiration date is one (1) year from date of receipt.

Images

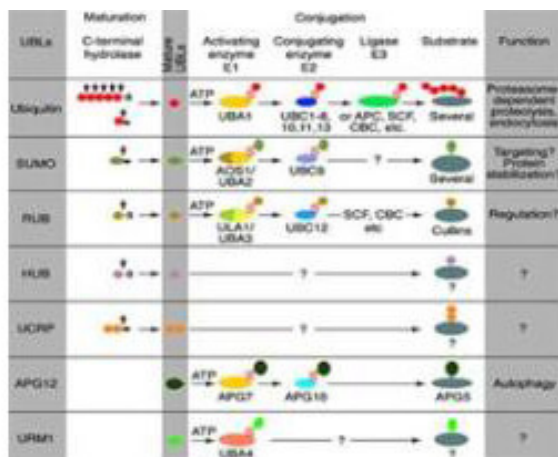


Western Blot

Western Blot of Anti-SKP1 Antibody.
Cyclin F physically interacts with Vif during HIV-1 infection in T cells. (B) cyclin F and Vif interacts endogenously during HIV-1 infection in 0.5 m.o.i. infected CEM-GFP (72 hpi) cells. Skp1 is also co-immunoprecipitated with cyclin F and Vif pulldown. All panels are representative of at least three independent experiments. IP, immunoprecipitation; IB, immunoblot. Fig 5. PMID: 28184007.

Western Blot

Western Blot of Anti-SKP1 Antibody.
Cyclin F binds to Vif through the CY motif in the C-terminal region of HIV-1 NL4-3 Vif. (B) depiction of CY mutant generation of Vif (upper panel). Cyclin F does not co-immunoprecipitate CY mutant Vif (lower panel). Cyclin F-Skp1 interaction is found to be intact, but cyclin F-Vif interaction is lost when CY mutant of Vif is co-transfected with cyclin F in transfected 293T cells. All panels represent data from at least two or more independent experiments. IP, immunoprecipitate; IB, immunoblot. Fig 6. PMID: 28184007.



Pathway

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 thioesters (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.

References

- Augustine, T et al. Cyclin F/FBXO1 Interacts with HIV-1 Viral Infectivity Factor (Vif) and Restricts Progeny Virion Infectivity by Ubiquitination and Proteasomal Degradation of Vif Protein through SCF/cyclin F E3 Ligase Machinery. *The Journal of Biological Chemistry* (2017)

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.