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SKP1 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1666a

Product Information

Application	WB, IHC, FC, E
Primary Accession	P63208
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	1H9
Isotype	IgG1
Calculated MW	18658
Description	This gene encodes a component of SCF complexes, which are composed of this protein, cullin 1, a ring-box protein, and one member of the F-box family of proteins. This protein binds directly to the F-box motif found in F-box proteins. SCF complexes are involved in the regulated ubiquitination of specific protein substrates, which targets them for degradation by the proteosome. Specific F-box proteins recognize different target protein(s), and many specific SCF substrates have been identified including regulators of cell cycle progression and development. Studies have also characterized the protein as an RNA polymerase II elongation factor. Alternative splicing of this gene results in two transcript variants. A related pseudogene has been identified on chromosome 7.
Immunogen	Purified recombinant fragment of human SKP1 expressed in E. Coli.
Formulation	Ascitic fluid containing 0.03% sodium azide.

Additional Information

Gene ID	6500
Other Names	S-phase kinase-associated protein 1, Cyclin-A/CDK2-associated protein p19, p19A, Organ of Corti protein 2, OCP-2, Organ of Corti protein II, OCP-II, RNA polymerase II elongation factor-like protein, SIII, Transcription elongation factor B polypeptide 1-like, p19skp1, SKP1, EMC19, OCP2, SKP1A, TCEB1L
Dilution	WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 FC~~1/200 - 1/400 E~~1/10000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	SKP1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SKP1
Synonyms	EMC19, OCP2, SKP1A, TCEB1L
Function	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, serves as an adapter that links the F-box protein to CUL1. The functional specificity of the SCF complex depends on the F-box protein as substrate recognition component. SCF(BTRC) and SCF(FBXW11) direct ubiquitination of CTNNB1 and participate in Wnt signaling. SCF(FBXW11) directs ubiquitination of phosphorylated NFKBIA. SCF(BTRC) directs ubiquitination of NFKBIB, NFKBIE, ATF4, SMAD3, SMAD4, CDC25A, FBXO5, CEP68 and probably NFKB2 (PubMed:25704143). SCF(SKP2) directs ubiquitination of phosphorylated CDKN1B/p27kip and is involved in regulation of G1/S transition. SCF(SKP2) directs ubiquitination of ORC1, CDT1, RBL2, ELF4, CDKN1A, RAG2, FOXO1A, and probably MYC and TAL1. SCF(FBXW7) directs ubiquitination of cyclin E, NOTCH1 released notch intracellular domain (NICD), and probably PSEN1. SCF(FBXW2) directs ubiquitination of GCM1. SCF(FBXO32) directs ubiquitination of MYOD1. SCF(FBXO7) directs ubiquitination of BIRC2 and DLGAP5. SCF(FBXO33) directs ubiquitination of YBX1. SCF(FBXO11) directs ubiquitination of BCL6 and DTL but does not seem to direct ubiquitination of TP53. SCF(BTRC) mediates the ubiquitination of NFKBIA at 'Lys-21' and 'Lys-22'; the degradation frees the associated NFKB1-RELA dimer to translocate into the nucleus and to activate transcription. SCF(CCNF) directs ubiquitination of CCP110. SCF(FBXL3) and SCF(FBXL21) direct ubiquitination of CRY1 and CRY2. SCF(FBXO9) directs ubiquitination of TTI1 and TELO2. SCF(FBXO10) directs ubiquitination of BCL2. Core component of the Cul7-RING(FBXW8) ubiquitin ligase complex, which mediates the ubiquitination and subsequent proteasomal degradation of target proteins (PubMed:35982156). Also acts as a core component of the Cul1- RING(FBXL4) ubiquitin ligase complex, which mediates the ubiquitination and subsequent proteasomal degradation of BNIP3 and BNI3L (PubMed:36896912).

References

1.J Biol Chem. 2008 Nov 7;283(45):30796-803. 2.Cell. 2009 Jul 23;138(2):389-403.

Images

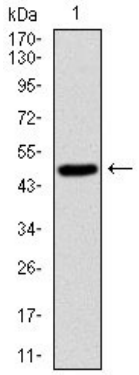


Figure 1: Western blot analysis using SKP1 mAb against human SKP1 (AA: 1-160) recombinant protein. (Expected MW is 50 kDa)

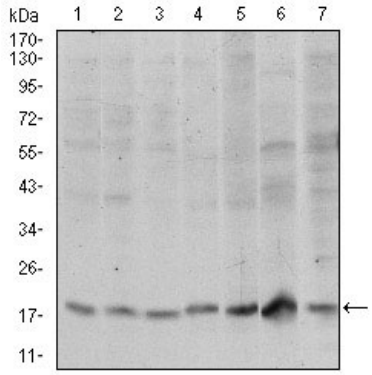


Figure 2: Western blot analysis using SKP1 mouse mAb against Hela (1), RAJI (2), Jurkat (3), MCF-7 (4), HepG2 (5), PC-12 (6) and Cos7 (7) cell lysate.

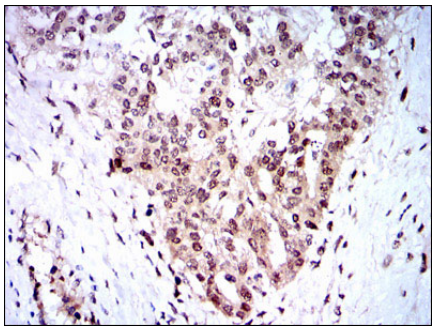


Figure 3: Immunohistochemical analysis of paraffin-embedded ovarian cancer tissues using SKP1 mouse mAb with DAB staining.

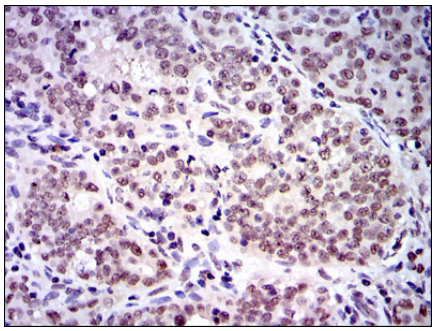


Figure 4: Immunohistochemical analysis of paraffin-embedded cervical cancer tissues using SKP1 mouse mAb with DAB staining.

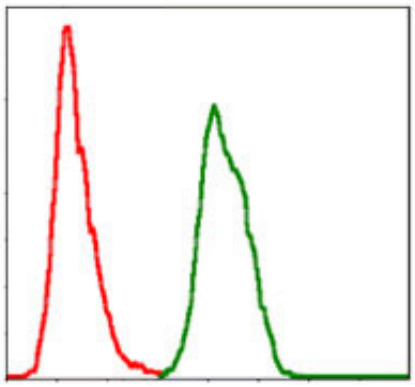


Figure 5: Flow cytometric analysis of Hela cells using SKP1 mouse mAb (green) and negative control (red).

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