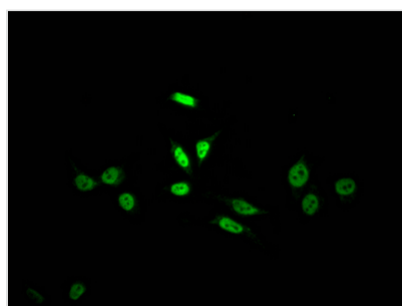




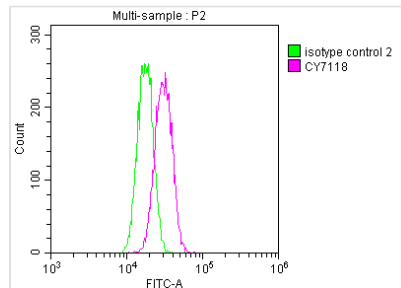
# SKP2 Recombinant Monoclonal Antibody

<b>Product Code</b>	CSB-RA155372A0HU
<b>Storage</b>	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
<b>Uniprot No.</b>	Q13309
<b>Immunogen</b>	A synthesized peptide derived from human SKP2
<b>Species Reactivity</b>	Human
<b>Tested Applications</b>	ELISA, IF, FC; Recommended dilution: IF:1:20-1:200, FC:1:20-1:200
<b>Relevance</b>	Substrate recognition component of a SCF (SKP1-CUL1-F-box protein) E3 ubiquitin-protein ligase complex which mediates the ubiquitination and subsequent proteasomal degradation of target proteins involved in cell cycle progression, signal transduction and transcription. Specifically recognizes phosphorylated CDKN1B/p27kip and is involved in regulation of G1/S transition. Degradation of CDKN1B/p27kip also requires CKS1. Recognizes target proteins ORC1, CDT1, RBL2, KMT2A/MLL1, CDK9, RAG2, FOXO1, UBP43, and probably MYC, TOB1 and TAL1. Degradation of TAL1 also requires STUB1. Recognizes CDKN1A in association with CCNE1 or CCNE2 and CDK2. Promotes ubiquitination and destruction of CDH1 in a CK1-Dependent Manner, thereby regulating cell migration.
<b>Form</b>	Liquid
<b>Conjugate</b>	Non-conjugated
<b>Storage Buffer</b>	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
<b>Purification Method</b>	Affinity-chromatography
<b>Isotype</b>	Rabbit IgG
<b>Clonality</b>	Monoclonal
<b>Product Type</b>	Recombinant Antibody
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Research Area</b>	Cancer; Cardiovascular; Cell biology
<b>Gene Names</b>	SKP2
<b>Clone No.</b>	3C11

## Image



Immunofluorescence staining of HepG2 Cells with CSB-RA155372A0HU at 1:50, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeated by 0.2% TritonX-100, and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4?. Nuclear DNA was labeled in blue with DAPI. The secondary antibody was FITC-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L).



Overlay histogram showing Hela cells stained with CSB-RA155372A0HU (red line) at 1:50. The cells were fixed with 70% Ethylalcohol (18h) and then incubated in 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody ( $1\mu\text{g}/1 \times 10^6$  cells) for 1 h at 4?. The secondary antibody used was FITC-conjugated goat anti-rabbit IgG (H+L) at 1/200 dilution for 30min at 4?. Control antibody (green line) was Rabbit IgG ( $1\mu\text{g}/1 \times 10^6$  cells) used under the same conditions. Acquisition of >10,000 events was performed.

## Description

To produce the SKP2 recombinant monoclonal antibody, the first step is to obtain the SKP2 monoclonal antibody-encoding gene. B cells were isolated from the animal immunized with a synthesized peptide derived from human SKP2 and were subsequently fused with myeloma cells to generate hybridomas. The SKP2 antibody-producing hybridomas were screened, and the variable light and variable heavy domains of the antibody were sequenced and cloned into a vector. The vector containing the SKP2 monoclonal antibody gene was then transfected into cells for cultivation, and the SKP2 recombinant monoclonal antibody was purified using affinity chromatography from the cell culture supernatant. This SKP2 recombinant monoclonal antibody has been specifically tested and found to react with human SKP2 samples in ELISA, IF, and FC applications.

The SKP2 protein is a component of the SCF (SKP1-CUL1-F-box protein) ubiquitin ligase complex, which plays a crucial role in the regulation of the cell cycle. SKP2 promotes cell cycle progression by facilitating the degradation of cyclin-dependent kinase (CDK) inhibitors and promoting the activation of CDKs, which drive the cell cycle forward. SKP2 has also been shown to play a role in the regulation of DNA replication and repair, as well as apoptosis. Dysregulation of SKP2 has been linked to various human diseases, including cancer, making it an important target for therapeutic intervention.