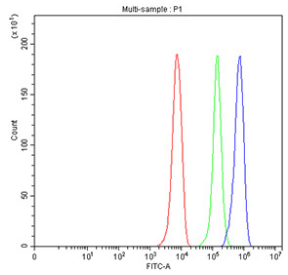
SKP2 Antibody / S-phase kinase-associated protein 2 (R30268)

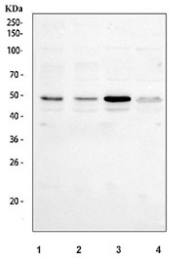
Catalog No.	Formulation	Size
R30268	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

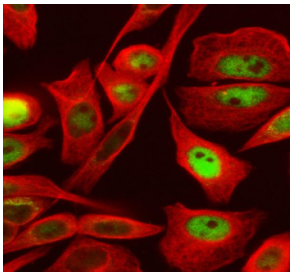
Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q13309
Localization	Cytoplasmic, Nuclear
Applications	Western Blot : 0.5-1ug/ml Immunofluorescence : 5ug/ml Flow Cytometry : 1-3ug/million cells
Limitations	This SKP2 antibody is available for research use only.



Flow cytometry testing of fixed and permeabilized human HepG2 cells with SKP2 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= SKP2 antibody.



Western blot testing of human 1) 293T, 2) Jurkat, 3) HepG2 and 4) MCF7 cell lysate with SKP2 antibody. Predicted molecular weight ~48 kDa.



Immunofluorescent staining of FFPE human SiHa cells with SKP2 antibody (green) and Alpha Tubulin mAb (red). HIER: steam section in pH6 citrate buffer for 20 min.

Description

SKP2 (S-phase kinase-associated protein 2) is an F-box protein that serves as a critical component of the SCF (SKP1-CUL1-F-box) E3 ubiquitin ligase complex. This protein functions as a substrate recognition subunit, directing the ubiquitination and subsequent proteasomal degradation of key cell cycle regulators, most notably the cyclin-dependent kinase inhibitors p27^Kip1 and p21^Cip1. Through this activity, SKP2 promotes cell cycle progression from G1 to S phase. A SKP2 antibody is commonly employed in studies of cell cycle regulation, ubiquitin-mediated degradation, and oncogenic signaling.

In normal physiology, SKP2 expression is tightly controlled and peaks during the S and G2 phases. Its regulation ensures proper timing of cell cycle transitions and balanced proliferation. However, overexpression of SKP2 has been documented in many human cancers, including breast, prostate, and lung cancers, where it correlates with increased cell proliferation and poor clinical outcomes. By using a SKP2 antibody, researchers can investigate how changes in SKP2 levels influence tumor growth, metastasis, and response to therapy.

Beyond cancer, SKP2 has been linked to other cellular processes such as DNA repair, apoptosis, and signal transduction. It interacts with various proteins that modulate transcriptional networks and survival pathways. This broad functional scope highlights SKP2 as an important molecular node in cellular homeostasis. Employing a SKP2 antibody enables the detailed exploration of these pathways in both normal and pathological contexts.

NSJ Bioreagents provides a high-quality SKP2 antibody validated for western blot, immunohistochemistry, and immunofluorescence. By choosing a SKP2 antibody from NSJ Bioreagents, researchers gain a reliable reagent for advancing studies in cell cycle control, cancer biology, and therapeutic development.

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the SKP2 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

An amino acid sequence from the N-terminus of human S-phase kinase-associated protein 2 (HRKHLQEIPDLSSNVATSF) was used as the immunogen for this SKP2 antibody.

Storage

After reconstitution, the SKP2 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.