bs-0742R **[Primary Antibody]**

CDKN1B/p27 KIP 1 Rabbit pAb

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DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 1027 **SWISS:** P46527

Target: CDKN1B/p27 KIP 1

Immunogen: KLH conjugated synthetic peptide derived from human P27 kip1: 101-198/198.

Purification: affinity purified by Protein A

Concentration: 1mg/ml

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: Cell cycle progression is regulated by cyclins and their cognate Cdks. p27 KIP 1 is a cell cycle regulatory mitotic inhibitor of cdk activity. p27 KIP 1 is a candidate tumor suppressor gene, and has been proposed to function as a possible mediator of TGF beta induced G1 arrest. p27 KIP 1 is up regulated in response to antimitogenic stimuli. The increased protein expression of p27 results in cellular arrest by binding to cyclin/Cdk complexes such as cyclin D1/Cdk4. p27 Kip1 is regulated by phosphorylation on serine 10 (S10) and threonine 187 (T187). Phosphorylation by CDK2 on T187 results in ubiquitylation and degradation of p27 Kip 1; while phosphorylation by hKIS on S10 signals the nuclear export to the cytoplasm.

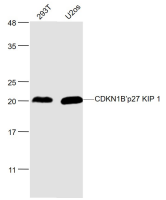
Applications: **WB** (1:500-2000)
IHC-P (1:100-500)
IHC-F (1:100-500)
IF (1:200-800)
Flow-Cyt (1μg/Test)

Reactivity: Human, Mouse, Rat (predicted: Pig, Sheep, Chicken, Dog)

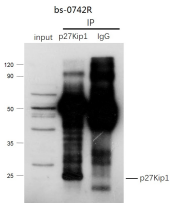
Predicted MW.: 22 kDa

Subcellular Location: Cytoplasm ,Nucleus

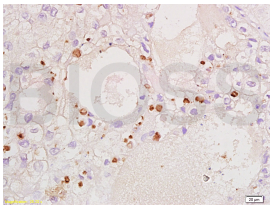
VALIDATION IMAGES



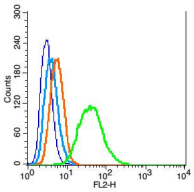
Sample: 293T(Human) Cell Lysate at 30 ug U2os(Human) Cell Lysate at 30 ug Primary: Anti-CDKN1B' p27 KIP 1 (bs-0742R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 22 kD Observed band size: 22 kD



CDKN1B (p27Kip1) was immunoprecipitated from mouse kidney tissue with bs-0742R at 1/150 dilution. Western blot was performed from the immunoprecipitate using protein A/G beads. HRP Conjugated Goat anti-Rabbit IgG (Heavy Chain specific) was used as secondary antibody at 1:5000 dilution. Lane 1: mouse kidney tissue lysate 10 μg (Input). Lane 2: bs-0742R IP in mouse kidney tissue lysate. Lane 3: native rabbit IgG IP in mouse kidney tissue lysate (negative control). Secondary All lanes Goat anti-Rabbit IgG (Heavy Chain specific), HRP Conjugated, 1:5000



Tissue/cell: human ovary carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37∩ for 20 min; Incubation: Anti-CDKN1B/P27kip1 Polyclonal Antibody, Unconjugated(bs-0742R) 1:200, overnight at 4Σ C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Blank control: RSC96(blue), the cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with ice-cold 90% methanol for 30 min on ice. Isotype Control Antibody: Rabbit IgG(orange) ; Secondary Antibody: Goat anti-rabbit IgG-PE(white blue), Dilution: 1:200 in 1 X PBS containing 0.5% BSA ; Primary Antibody Dilution: 1µg in 100µL1X PBS containing 0.5% BSA(green).

SELECTED CITATIONS

- **[IF=7.3]** Wang Haining. et al. Integrative analysis identifies oxidative stress biomarkers in non-alcoholic fatty liver disease via machine learning and weighted gene co-expression network analysis. FRONT IMMUNOL. 2024 Feb;15: WB ;Mouse. 38476236
- **[IF=6.1]** Cuifang Chang. et al. The orphan GPR50 receptor interacting with TβRI induces G1/S-phase cell cycle arrest via Smad3-p27/p21 in BRL-3A cells. BIOCHEM PHARMACOL. 2022 Aug;202:115117 WB ;Rat. 35671788
- **[IF=4.82]** Gao, LiLi, et al. "Protein-Binding Function of RNA-Dependent Protein Kinase Promotes Proliferation through TRAF2/RIP1/NF-κB/c-Myc Pathway in Pancreatic β cells." Molecular Medicine 21.1 (2015): 154. WB ;="Mouse". 25715336
- **[IF=5.13]** Akizuki, Risa, et al. "Claudin-5,− 7, and− 18 suppress proliferation mediated by inhibition of phosphorylation of Akt in human lung squamous cell carcinoma." Biochimica et Biophysica Acta (BBA)-Molecular Cell Research (2016). WB ;="Human". 27884700
- **[IF=3.647]** Ali B et al. Control of preadipocyte proliferation, apoptosis and early adipogenesis by the forkhead transcription factor FoxO6Life Sci.2021 Jan 15;265:118858. WB ;Chicken. 33290791