
p21 Rabbit pAb

Catalog Number: bs-55160R

Target Protein: p21

Concentration: 1mg/ml

Form: Liquid

Host: Rabbit

Clonality: Polyclonal

Isotype: IgG

Applications: WB (1:500-2000), IHC-P (1:20-100), IHC-F (1:20-100), IF (1:100-500)

Reactivity: Human (predicted:Mouse, Rat)

Predicted MW: 18 kDa

Entrez Gene: 1026

Swiss Prot: P38936

Source: Recombinant human p21: 1-164/164.

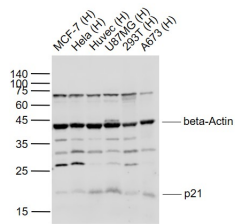
Purification: affinity purified by Protein A

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

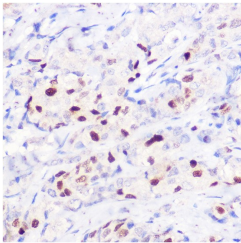
Store at -20°C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4°C.

Background: This gene encodes a potent cyclin-dependent kinase inhibitor. The encoded protein binds to and inhibits the activity of cyclin-CDK2 or -CDK4 complexes, and thus functions as a regulator of cell cycle progression at G1. The expression of this gene is tightly controlled by the tumor suppressor protein p53, through which this protein mediates the p53-dependent cell cycle G1 phase arrest in response to a variety of stress stimuli. This protein can interact with proliferating cell nuclear antigen (PCNA), a DNA polymerase accessory factor, and plays a regulatory role in S phase DNA replication and DNA damage repair. This protein was reported to be specifically cleaved by CASP3-like caspases, which thus leads to a dramatic activation of CDK2, and may be instrumental in the execution of apoptosis following caspase activation. Two alternatively spliced variants, which encode an identical protein, have been reported. Two families of cyclin dependent kinase inhibitors (CKIs) have been identified. The p21WAF1/Cip1 family inhibits all kinases involved in the G1/S transition. The p16INK4a family inhibits Cdk4 and Cdk6 specifically.

VALIDATION IMAGES



Sample: Lane 1: MCF-7 (Human) Cell Lysate at 30 ug Lane 2: HeLa (Human) Cell Lysate at 30 ug Lane 3: Huvec (Human) Cell Lysate at 30 ug Lane 4: U87MG (Human) Cell Lysate at 30 ug Lane 5: 293T (Human) Cell Lysate at 30 ug Lane 6: A673 (Human) Cell Lysate at 30 ug Primary: Anti- p21 (bs-55160R) at 1/1000 dilution Anti-beta-Actin (bs-0061R) at 1/2000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 21 kD Observed band size: 21 kD



Paraformaldehyde-fixed, paraffin embedded (human breast cancer); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (p21) Polyclonal Antibody, Unconjugated (bs-55160R) at 1:100 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

PRODUCT SPECIFIC PUBLICATIONS

[IF=10] Jiawen Zhan. et al. Cartilage Endplate-Targeted Engineered Exosome Releasing and Acid Neutralizing Hydrogel Reverses Intervertebral Disc Degeneration. ADV HEALTHC MATER. 2024 Nov;;2403315 WB ; Rat . 39555665

[IF=9.995] Zixin Zhou. et al. CX3CR1hi macrophages sustain metabolic adaptation by relieving adipose-derived stem cell senescence in visceral adipose tissue. CELL REP. 2023 May;42:112424 WB ; Mouse . 37086405

[IF=4.8] Qiao Zhou. et al. Jianpi Qingre Tongluo prescription alleviates the senescence-associated secretory phenotype with osteoarthritis by regulating STAG1/TP53/P21 signaling pathway. J ETHNOPHARMACOL. 2024 Oct;;118953 IHC,IF ; Rat . 39423944

[IF=5.011] Luya Pu. et al. TXNRD1 knockdown inhibits the proliferation of endothelial cells subjected to oscillatory shear stress via activation of the endothelial nitric oxide synthase/apoptosis pathway. BBA-MOL CELL RES. 2023 Apr;1870:119436 WB ; Human . 36754152

[IF=4.432] Luya Pu. et al. Icaritin arrests cell cycle progression and induces cell apoptosis through the mitochondrial pathway in human fibroblast-like synoviocytes. Eur J Pharmacol. 2021 Dec;912:174585 WB ; Human . 34678240