

# Anti-p21 (KO Validated) Antibody

CATALOG NO.: A2120-100 (100 µl)

**BACKGROUND DESCRIPTION:** This gene encodes a potent cyclin-dependent kinase inhibitor. The encoded protein binds to and inhibits the activity of cyclin-cyclin-dependent kinase2 or -cyclin-dependent kinase4 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, 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 cyclin-dependent kinase2, and may be instrumental in the execution of apoptosis following caspase activation. Mice that lack this gene have the ability to regenerate damaged or missing tissue. Multiple alternatively spliced variants have been found for this gene.

**ALTERNATE NAMES:** CAP20; CDKN1; CIP1; MDA-6; P21; SDI1; WAF1; p21CIP1; CDKN1A

**ANTIBODY TYPE:** Monoclonal

**HOST/ISOTYPE:** Rabbit / IgG

**IMMUNOGEN:** Synthetic peptide derived from human p21

**MOLECULAR WEIGHT:** 20 kDa

**PURIFICATION:** Affinity purified

**FORM:** Liquid

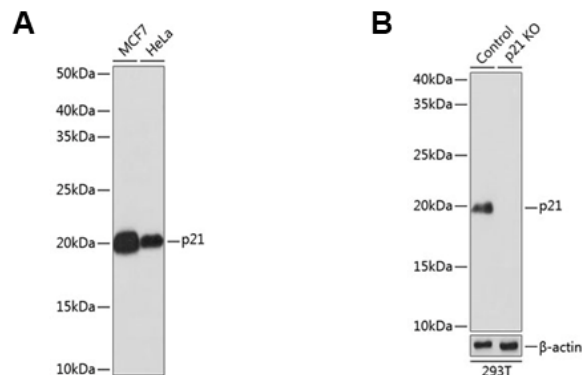
**FORMULATION:** In PBS with 0.02% sodium azide, 50% glycerol, pH 7.3

**SPECIES REACTIVITY:** Human

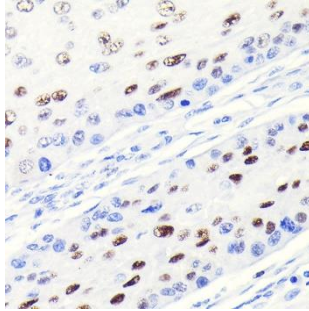
**STORAGE CONDITIONS:** Store at -20°C. Avoid freeze / thaw cycles

**APPLICATIONS AND USAGE:** WB 1:500 - 1:2000, IHC 1:50 - 1:200

This information is only intended as a guide. The optimal dilutions must be determined by the user



Western blot analysis of MCF7 and HeLa cell extracts (A), control and p21 KO cells (B) using Anti-p21 (KO Validated) antibody at 1:1000 dilution. Secondary antibody used was HRP Goat Anti-Rabbit IgG (H+L) at 1:10000 dilution. 25 µg of lysates/proteins were loaded per lane. 3% nonfat dry milk in TBST was used as blocking buffer. ECL Enhanced Kit was used for detection and exposure time was 3 min.



Immunohistochemistry of paraffin-embedded human esophageal cancer using Anti-p21 (KO Validated) antibody at a dilution of 1:100 (Magnification: 40x).

**RELATED PRODUCTS:**

Anti-p53 Antibody (IHC053) (A1547)  
PCNA Antibody (3350R)  
Anti-BRCA1 Antibody (BRCA1/1398)  
p44/42 MAPK (Erk1/2) Antibody (3085R)

***FOR RESEARCH USE ONLY! Not to be used on humans.***