Anti-CDKN1A/P21 Antibody

ER1906-07

Product Type:	Rabbit polyclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat, Dog, Rabbit
Applications:	ELISA, IHC-P, FC, IF-Tissue, IF-Cell
Molecular Wt:	18 KDa

Description: May be the important intermediate by which p53/TP53 mediates its role as an inhibitor of cellular proliferation in response to DNA damage. Binds to and inhibits cyclin-dependent kinase activity, preventing phosphorylation of critical cyclin-dependent kinase substrates and blocking cell cycle progression. Functions in the nuclear localization and assembly of cyclin D-CDK4 complex and promotes its kinase activity towards RB1. At higher stoichiometric ratios, inhibits the kinase activity of the cyclin D-CDK4 complex.

Immunogen: KLH conjugated synthetic peptide derived from human P21 21-100/164

Positive control: Expressed in all adult tissues, with 5-fold lower levels observed in the brain.

Subcellular location: Cytoplasmic and Nuclear.

Database links: SwissProt: P38936 Human

Recommended Dilutions:

ELISA	1:5000-10000
IHC-P	1:100-500
FC	1μg/Test
IF-Tissue	1:100-500
IF-Cell	1:100

Storage Buffer: 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.

Storage Instruction: Store at -20℃ 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℃. 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℃.

Purity: Protein A affinity purified.

Images

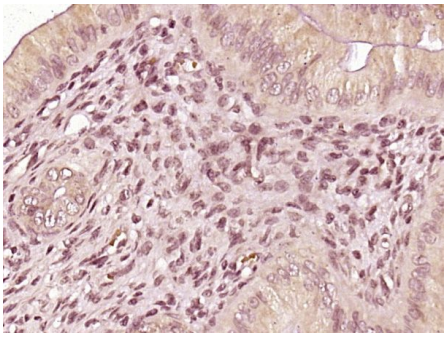

Fig1: Paraformaldehyde-fixed, paraffin embedded (Rat uterus); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37℃ for 30min; Antibody incubation with (P21) Polyclonal Antibody, Unconjugated (ER1906-07) at 1:400 overnight at 4℃, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.

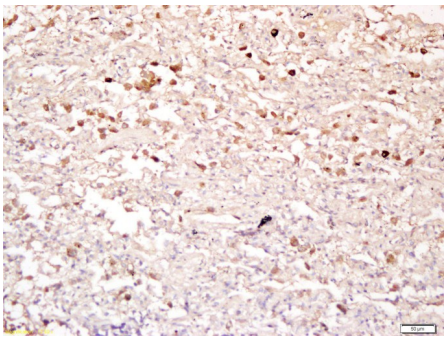

Fig2: Tissue/cell: human lung carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;
Incubation: Anti-P21 Polyclonal Antibody, Unconjugated(ER1906-07) 1:200, overnight at 4℃, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

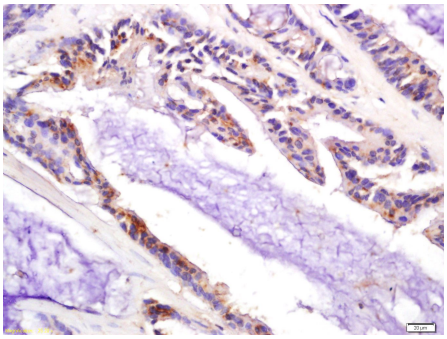

Fig3: Tissue/cell: human colon carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;
Incubation: Anti-P21 Polyclonal Antibody, Unconjugated(ER1906-07) 1:200, overnight at 4℃, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

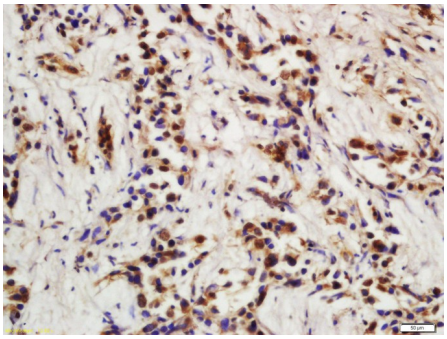

Fig4: Tissue/cell: human hepatoma tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;
Incubation: Anti-P21 Polyclonal Antibody, Unconjugated(ER1906-07) 1:200, overnight at 4℃, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

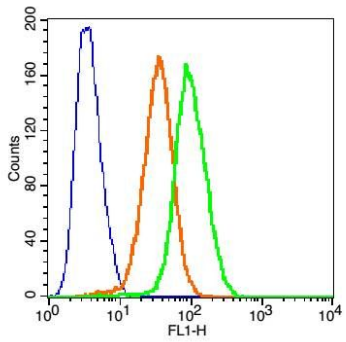

Fig5: Blank control(blue): Hep G2 Cells(fixed with 2% paraformaldehyde (10 min) and then permeabilized with ice-cold 90% methanol for 30 min on ice).
Primary Antibody: Rabbit Anti-TNFR1/FITC Conjugated antibody (ER1906-07 /FITC), Dilution: 1μg in 100 μL 1X PBS containing 0.5% BSA;
Isotype Control Antibody: Rabbit IgG/FITC(orange) ,used under the same conditions.

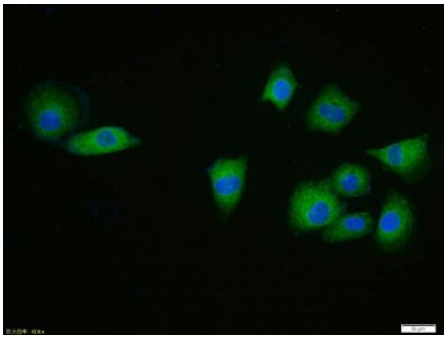

Fig6: Tissue/cell: HUVEC cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking buffer (normal goat serum, C-0005) at 37℃ for 20 min; Antibody incubation with (CDKN1A/P21) Polyclonal Antibody, Unconjugated (bs-10129R) 1:100, 90 minutes at 37℃; followed by a conjugated Goat Anti-Rabbit IgG antibody (bs-0295G-FITC) at 37℃ for 90 minutes, DAPI (blue, C02-04002) was used to stain the cell nuclei.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".