Best Tools for immunology Research

p21 (PT0544R) PT® Rabbit mAb

Catalog No :	YM8364
Reactivity :	Mouse; Rat;
Applications :	WB;IHC;IF;IP;ELISA
Target :	P21
Gene Name :	CDKN1A CAP20 CDKN1 CIP1 MDA6 PIC1 SDI1 WAF1
Protein Name :	p21
Human Gene Id :	1026
Human Swiss Prot No :	P38936
Mouse Gene Id :	12575
Mouse Swiss Prot No :	P39689
Specificity :	endogenous
Formulation :	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source :	Monoclonal, rabbit, IgG, Kappa
Dilution :	IHC 1:500-1:2000;WB 1:2000-1:10000;IF 1:200-1:1000;ELISA 1:5000-1:20000;IP 1:50-1:200;
Purification :	Protein A
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Molecularweight :	18kD
Observed Band :	18kD

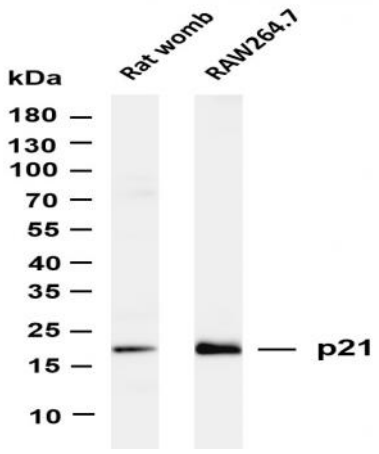
Background : This gene encodes a potent cyclin-dependent kinase inhibitor. The encoded protein binds to and inhibits the activity of cyclin-cyclin-dependent kinase2 or -cyclin-dependent kinase4 complexes, and thus functions as a regulator of cell cycle progression at G1. The expression of this gene is 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 lac

Function : function:May be the important intermediate by which p53 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.,induction:By p53, mezerein (antileukemic compound) and interferon beta.,PTM:Phosphorylation of Thr-145 by Akt or of Ser-146 by PKC impairs binding to PCNA.,similarity:Belongs to the CDI family.,tissue specificity:Expressed in all adult human tissues, with 5-fold lower levels observed in the brain.,

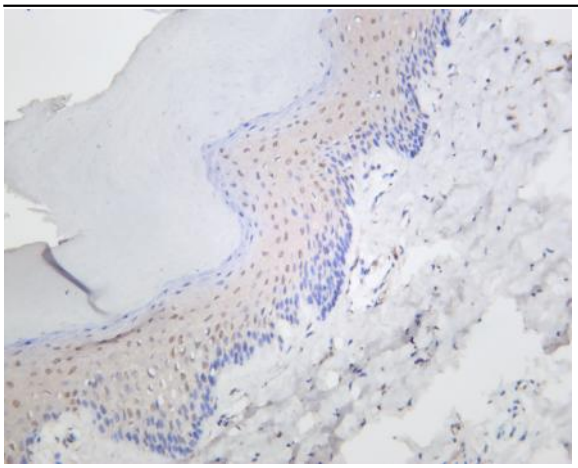
Subcellular Location : Nucleus

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

Products Images



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-p21 (PT0544R) antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: Rat womb Lane 2: RAW264.7 Predicted band size: 18kDa Observed band size: 18kDa



Rat skin was stained with anti-p21 (PT0544R) rabbit antibody