For Research Use Only

P27; KIP1 Recombinant monoclonal antibody

Catalog Number:88823-1-RR

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Basic Information

Catalog Number:
88823-1-RR

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG22582

GenBank Accession Number:
BC001971

GeneID (NCBI):
1027

UNIPROT ID:
P46527

Full Name:
cyclin-dependent kinase inhibitor 1B (p27, Kip1)

Calculated MW:
198 aa, 22 kDa

Observed MW:
27 kDa

Purification Method:
Protein A purification

CloneNo.:
261313A2

Recommended Dilutions:
WB: 1:2000-1:10000
IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
IHC: 1:200-1:800
IF/ICC: 1:200-1:800

Applications

Tested Applications:
WB, IHC, IF/ICC, IP, ELISA

Species Specificity:
human, mouse, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : HeLa cells, HepG2 cells, MCF-7 cells, Jurkat cells, K-562 cells, NIH/3T3 cells, HSC-T6 cells

IP : NIH/3T3 cells,

IHC : human ovary cancer tissue,

IF/ICC : NIH/3T3 cells,

Background Information

CDKN1B, also named as P27 or KIP1, is a cyclin-dependent kinase inhibitor, which shares a limited similarity with CDK inhibitor CDKN1A/p21. P27 binds to and prevents the activation of cyclin E-CDK2 or cyclin D-CDK4 complexes, and thus controlling cell cycle progression at G1. The degradation of this protein, which is triggered by its CDK dependent phosphorylation and subsequent ubiquitination by SCF complexes, is required for the cellular transition from quiescence to the proliferative state. Downregulation of P27 has been implicated in the progression of several malignancies, including lung cancer, hepatocellular carcinoma, salivary cancer, oral squamous cell carcinomas, and gastric cancer.

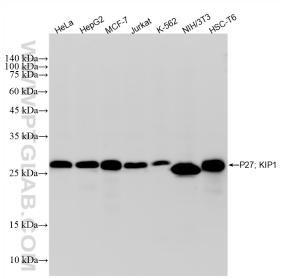
Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

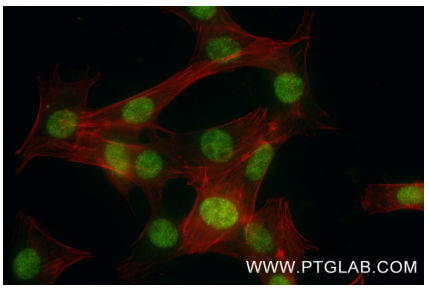
For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

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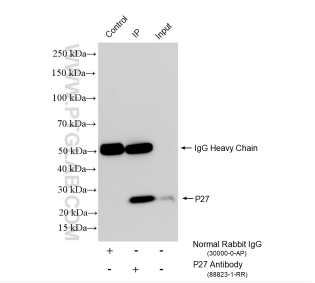
Selected Validation Data



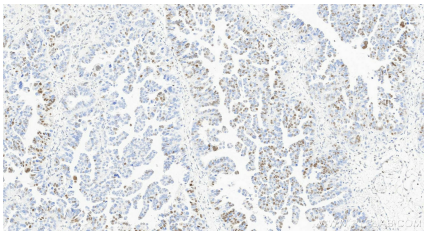
Various lysates were subjected to SDS PAGE followed by western blot with 88823-1-RR (P27; KIP1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



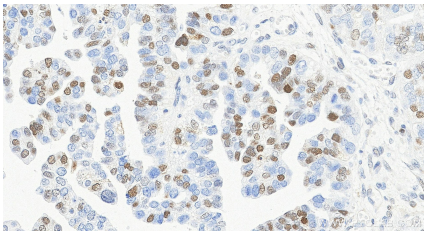
Immunofluorescent analysis of (4% PFA) fixed NIH/3T3 cells using P27; KIP1 antibody (88823-1-RR, Clone: 261313A2) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).



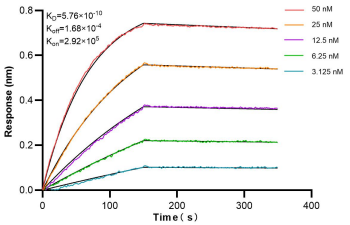
IP result of anti-P27; KIP1 (IP:88823-1-RR, 4ug; Detection:88823-1-RR 1:1500) with NIH/3T3 cells lysate 1040 ug.



Immunohistochemical analysis of paraffin-embedded human ovary cancer tissue slide using 88823-1-RR (P27; KIP1 antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human ovary cancer tissue slide using 88823-1-RR (P27; KIP1 antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Biolayer interferometry (BLI) kinetic assays of 88823-1-RR against Human P27; KIP1 were performed. The affinity constant is 0.576 nM.