For Research Use Only

P27; KIP1 Recombinant monoclonal antibody, PBS Only (Capture)

Catalog Number:88823-1-PBS

proteintech®
Antibodies | ELISA kits | Proteins
www.ptglab.com

Basic Information

Catalog Number:
88823-1-PBS

Size:
100ug , Concentration: 1 mg/ml by Nanodrop;

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

Applications

Tested Applications:
WB, IHC, IF/ICC, IP, Cytometric bead array, Indirect ELISA

Species Specificity:
human, mouse, rat

Product Information

88823-1-PBS targets P27; KIP1 as part of a matched antibody pair:

MP03680-1: 88823-1-PBS capture and 88823-2-PBS detection (validated in Cytometric bead array)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications.Antibody use should be optimized by the end user for each application and assay.

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.

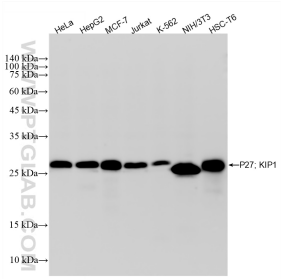
Storage

Storage:
Store at -80°C.
Storage Buffer:
PBS only, pH7.3

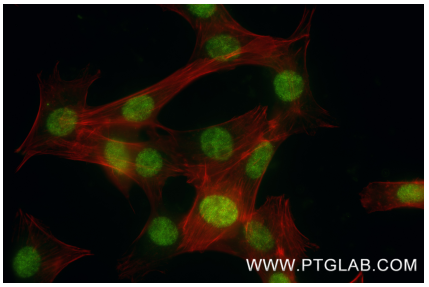
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

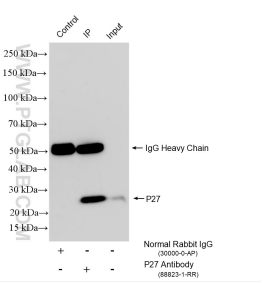
Selected Validation Data



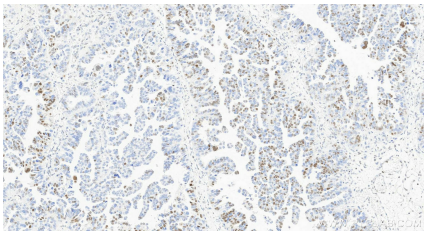
Various lysates were subjected to SDS PAGE followed by western blot with 88823-1-RR (P27; KIP1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 88823-1-PBS in a different storage buffer formulation.



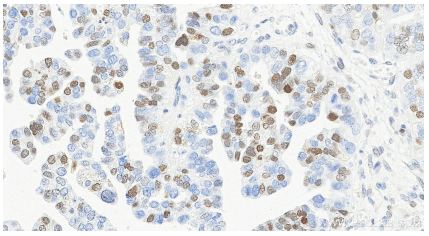
Immunofluorescent analysis of (4% PFA) fixed NIH/3T3 cells using P27; KIP1 antibody (88823-1-RR, Clone: 261313A2) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 88823-1-PBS in a different storage buffer formulation.



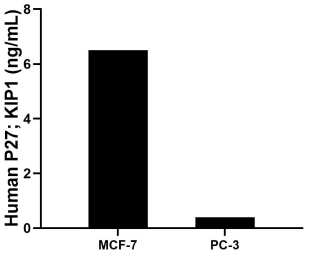
IP result of anti-P27; KIP1 (IP:88823-1-RR, 4ug; Detection:88823-1-RR 1:1500) with NIH/3T3 cells lysate 1040 ug. This data was developed using the same antibody clone with 88823-1-PBS in a different storage buffer formulation.



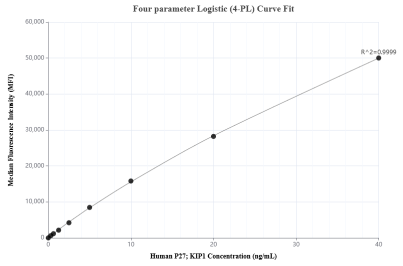
Immunohistochemical analysis of paraffin-embedded human ovary cancer tissue slide using 88823-1-RR (P27; KIP1 antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 88823-1-PBS in a different storage buffer formulation.



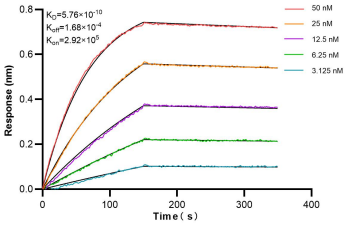
Immunohistochemical analysis of paraffin-embedded human ovary cancer tissue slide using 88823-1-RR (P27; KIP1 antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 88823-1-PBS in a different storage buffer formulation.



The mean P27; KIP1 concentration was determined to be 6.5 ng/mL in MCF-7 cell extract based on a 1.2 mg/mL extract load, 0.4 ng/mL in PC-3 cell extract based on a 1.2 mg/mL extract load.



Cytometric bead array standard curve of MP03680-1, P27; KIP1 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 88823-1-PBS. Detection antibody: 88823-2-PBS. Standard: Ag22582. Range: 0.312-40 ng/mL.



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