Product Information Sheet

Polyclonal Anti-P27

Catalogue No. PA1063

Lot No.03A01

Ig type: rabbit IgG

Size: 100μg/vial

Specificity

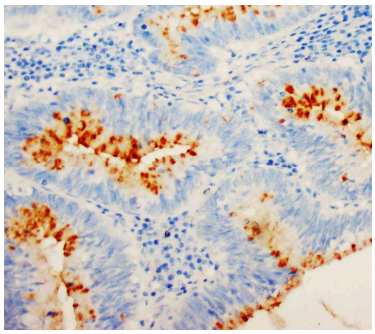
Human, mouse, rat.

No cross reactivity with other proteins.

Recommended application

Western blot

Immunohistochemistry(P)



Immunogen

A peptide mapping at the C-terminal end of P27 of human origin, differs from the related rat sequence by single amino acid.

Purity

Immunogen affinity purified.

Application

Western blot

At 1-2μg/ml with the appropriate system to detect P27 in cells and tissues.

Immunohistochemistry(P)

At 1-2μg/ml to detect P27 in formalin fixed and paraffin embedded tissues. Boiling the sections is required.

Other applications have not been tested.

Optimal dilutions should be determined by end user.

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na_2HPO_4, 0.05mg Thimerosal, 0.05mg NaN_3.

Reconstitution

0.2ml of distilled water will yield a concentration of 500μg/ml.

To reorder contact us at:

Antagene, Inc.

Toll Free: 1(866)964-2589

email: Info@antageneinc.com

Storage

At -20˚C for one year. After reconstitution, at 4˚C for one month. It can also be aliquotted and stored frozen at -20˚C for longer time.

BACKGROUND

Cyclin-dependent kinase inhibitor 1B (CDKN1B), also known as p27 (KIP1), is a cyclin-dependent kinase (Cdk) inhibitor implicated in G1 phase arrest, which negatively regulates G1 phase progression in response to TGF beta and represents a tumor suppressor gene. Human p27 gene is mapped to chromosome 12p12.3 p27 can be both an inhibitor and a substrate of cyclin E-CDK2. p27, abundant in quiescent cells and drops after serum stimulation, plays a role in mediating VSMC hypertrophy. p27 degradation is subject to dual control by the accumulation of both SKP2 and cyclins following mitogenic stimulation. It regulates cell proliferation by binding to and modulating the activity of cyclin-dependent kinases. Reduced p27 activity is fundamental for the development of many human malignancies including breast, prostate, colon and gastric carcinomas.

REFERENCE

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3. Braun-Dullaeus RC, Mann MJ, Ziegler A, von der Leyen HE, Dzau VJ.A novel role for the cyclin-dependent kinase inhibitor p27(Kip1) in angiotensin II-stimulated vascular smooth muscle cell hypertrophy. J Clin Invest. 1999 Sep; 104(6):815-23.

4. Carrano AC, Eytan E, Hershko A, Pagano M.SKP2 is required for ubiquitin-mediated degradation of the CDK inhibitor p27. Nat Cell Biol. 1999 Aug; 1(4):193-9.

5. Gopfert U, Kullmann M, Hengst L.Cell cycle-dependent translation of p27 involves a responsive element in its 5'-UTR that overlaps with a uORF. Hum Mol Genet. 2003 Jul 15; 12(14):1767-79.