

## Product datasheet for **TA327053**

### p21 (CDKN1A) Rabbit Polyclonal Antibody

#### Product data:

|                       |  |
|-----------------------|--|
| Product Type:         | Primary Antibodies   |
| Applications:         | ICC/IF, WB   |
| Recommended Dilution: | WB 1:500 - 1:2000;IF 1:50 - 1:200  |
| Reactivity:           | Human, Mouse, Rat  |
| Host:                 | Rabbit   |
| Isotype:              | IgG  |
| Clonality:            | Polyclonal   |
| Immunogen:            | Recombinant protein of human CDKN1A  |
| Formulation:          | Buffer: PBS with 0.09% Sodium azide,50% glycerol,pH7.3.  |
| Concentration:        | lot specific   |
| Purification:         | Affinity purification  |
| Conjugation:          | Unconjugated   |
| Storage:              | Store at -20°C as received.  |
| Stability:            | Stable for 12 months from date of receipt.   |
| Gene Name:            | cyclin-dependent kinase inhibitor 1A   |
| Database Link:        | <a href="#">NP_510867</a><br><a href="#">Entrez Gene 12575 Mouse</a> <a href="#">Entrez Gene 114851 Rat</a> <a href="#">Entrez Gene 1026 Human</a><br><a href="#">P38936</a> |

**Background:** The tumor suppressor protein p21 Waf1/Cip1 acts as an inhibitor of cell cycle progression. It functions in stoichiometric relationships forming heterotrimeric complexes with cyclins and cyclin-dependent kinases. In association with CDK2 complexes, it serves to inhibit kinase activity and block progression through G1/S. However, p21 may also enhance assembly and activity in complexes of CDK4 or CDK6 and cyclin D. The carboxy-terminal region of p21 is sufficient to bind and inhibit PCNA, a subunit of DNA polymerase, and may coordinate DNA replication with cell cycle progression. Upon UV damage or during cell cycle stages when cdc2/cyclin B or CDK2/cyclin A is active, p53 is phosphorylated and upregulates p21 transcription via a p53-responsive element. Protein levels of p21 are downregulated through ubiquitination and proteasomal degradation.



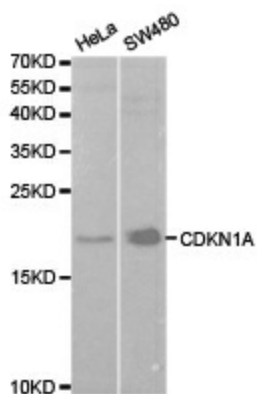
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**Synonyms:** CAP20; CDKN1; CIP1; MDA-6; P21; p21CIP1; SDI1; WAF1

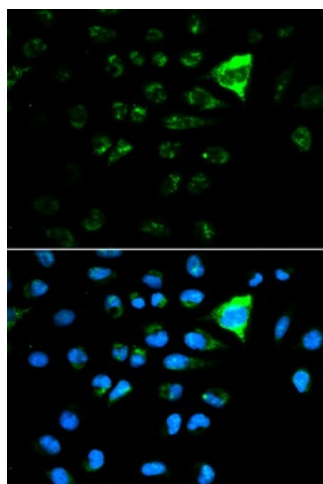
**Protein Families:** Druggable Genome

**Protein Pathways:** Bladder cancer, Cell cycle, Chronic myeloid leukemia, ErbB signaling pathway, Glioma, Melanoma, p53 signaling pathway, Pathways in cancer, Prostate cancer

### Product images:



Western blot analysis of extracts of various cell lines, using CDKN1A antibody.



Immunofluorescence analysis of MCF7 cell using CDKN1A antibody. Blue: DAPI for nuclear staining.