

p21 Rabbit mAb

Catalog # AP75848

Product Information

Application WB Primary Accession P38936

Reactivity Human, Mouse

Host Rabbit

Clonality Monoclonal Antibody

Calculated MW 18119

Additional Information

Gene ID 1026

Other Names CDKN1A

Dilution WB~~1/500-1/1000

Format Liquid

Protein Information

Name CDKN1A (HGNC:1784)

Function Plays an important role in controlling cell cycle progression and DNA

damage-induced G2 arrest (PubMed:9106657). Involved in p53/TP53 mediated inhibition of cellular proliferation in response to DNA damage. Also involved in p53-independent DNA damage-induced G2 arrest mediated by CREB3L1 in astrocytes and osteoblasts (By similarity). Binds to and inhibits cyclin-dependent kinase activity, preventing phosphorylation of critical cyclin-dependent kinase substrates and blocking cell cycle progression. Functions in the nuclear localization and assembly of cyclin D-CDK4 complex and promotes its kinase activity towards RB1. At higher stoichiometric ratios, inhibits the kinase activity of the cyclin D-CDK4 complex. Inhibits DNA synthesis by DNA polymerase delta by competing with POLD3 for PCNA binding (PubMed:11595739). Negatively regulates the CDK4- and CDK6-driven phosphorylation of RB1 in keratinocytes, thereby resulting in the release of

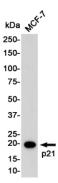
E2F1 and subsequent transcription of E2F1-driven G1/S phase promoting

genes (By similarity).

Cellular Location Cytoplasm. Nucleus

Tissue Location Expressed in all adult tissues, with 5-fold lower levels observed in the brain

Images



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