CDKN2A antibody (pAb)

Catalog Nos: 61619, 61620

RRID: AB_2793705
Isotype: IgG
Application(s): IP, WB
Reactivity: Human

Volumes: 100 µl, 10 µl
Purification: Affinity Purified
Host: Rabbit
Molecular Weight: 16 kDa

Background: CDKN2A (Cyclin-Dependent Kinase Inhibitor 2A) is capable of inducing cell cycle arrest in G1 and G2 phases. Acts as a tumor suppressor. Binds to MDM2 and blocks its nucleocytoplasmic shuttling by sequestering it in the nucleolus. This inhibits the oncogenic action of MDM2 by blocking MDM2-induced degradation of p53 and enhancing p53-dependent transactivation and apoptosis. Also induces G2 arrest and apoptosis in a p53-independent manner by preventing the activation of cyclin B1/CDC2 complexes. Binds to BCL6 and down-regulates BCL6-induced transcriptional repression. Binds to E2F1 and MYC and blocks their transcriptional activator activity but has no effect on MYC transcriptional repression. Binds to TOP1/TOPOI and stimulates its activity. This complex binds to rRNA gene promoters and may play a role in rRNA transcription and/or maturation. Interacts with NPM1/B23 and promotes its polyubiquitination and degradation, thus inhibiting rRNA processing. Interacts with COMMD1 and promotes its 'Lys63'-linked polyubiquitination. Interacts with UBE2I/UBC9 and enhances sumoylation of a number of its binding partners including MDM2 and E2F1. Binds to HUWE1 and represses its ubiquitin ligase activity. May play a role in controlling cell proliferation and apoptosis during mammary gland development. Isoform 6 may be involved in regulation of autophagy and caspase-independent cell death; the short-lived mitochondrial isoform is stabilized by C1QBP.

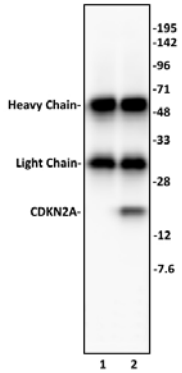
Multiple protein isoforms are encoded by this gene. The p16 isoform, also known as INK4a, is a CDK4 & CDK6 kinase inhibitor. It functions as negative regulator of the proliferation of normal cells and plays a role in aging and senescence.

Immunogen: This antibody was raised against a peptide within the N-terminal region of the p16/INK4a isoform of human CDKN2A.

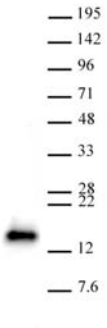
Buffer: Purified IgG in PBS with 30% glycerol and 0.035% sodium azide. Sodium azide is highly toxic.

Application Notes:
Applications Validated by Active Motif:
IP: 10 µl per IP
WB: 1:500 - 1:2,000 dilution

Storage and Guarantee: Some products may be shipped at room temperature. This will not affect their stability or performance. Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage. This product is guaranteed for 12 months from date of receipt.



CDKN2A antibody (pAb) tested by Immunoprecipitation.
10 µl of CDKN2A antibody was used to immunoprecipitate CDKN2A from 400 µg of HeLa whole cell extract (lane 2). 10 µl of rabbit IgG was used as a negative control (lane 1). The immunoprecipitated protein was detected by Western blotting using the CDKN2A antibody at a dilution of 1:500.



CDKN2A antibody (pAb) tested by Western blot.
Detection of CDKN2A by Western blot. The analysis was performed using 30 µg HeLa whole-cell extract and CDKN2A (pAb) at a 1:500 dilution.