

Rabbit anti-human CDKN2A Polyclonal Antibody

Catalog Number: R16015P

| General Information | |
|---|--|
| Immunogen | A synthetic peptide of human CDKN2A |
| IgG type | IgG |
| Clonality | Polyclonal |
| Specificity | human CDKN2A |
| Applications & dilution | WB 1:500 - 1:2000 IHC 1:50 - 1:200 IF 1:50 - 1:200 |
| Formulation | PBS with 0.02% sodium azide, 50% glycerol, pH7.3. |
| Purity | ≥95% purity by SDS-PAGE |
| Storage | Store at -20°C. Avoid freeze / thaw cycles. |
| Abbreviation: ELISA: Enzyme-linked immunosorbent assay; ITA: immunoturbidimetric assay; IP: immunoprecipitation; IHC: immunohistochemistry; IF: immunofluorescence. WB: western blot; FC: flowcytometry | |

Background

The division cycle of eukaryotic cells is regulated by a family of protein kinases known as the cyclin-dependent kinases (CDKs). The sequential activation of individual members of this family and their consequent phosphorylation of critical substrates promotes orderly progression through the cell cycle. It has been reported that CDKN2A binds to CDK4 and inhibits the catalytic activity of the CDK4/cyclin D enzymes. CDKN2A seems to act in a regulatory feedback circuit with CDK4, D-type cyclins and retinoblastoma protein. The INK4 (inhibitor of cyclin-dependent kinase 4) family consists of four tumor-suppressor proteins: p15(INK4B), CDKN2A(INK4A), p18(INK4C), and p19(INK4D). While their sequences and structures are highly homologous, they show appreciable differences in conformational flexibility, stability, and aggregation tendency. Cell cycle arrest at the G1 checkpoint allows completion of critical macromolecular events prior to S phase. Regulators of the G1 checkpoint include an inhibitor of cyclin-dependent kinase, CDKN2A/INK4; two tumor-suppressor proteins, p53 and RB and cyclin D1. CDKN2A/INK4 is a tumor-suppressor protein and that genetic and epigenetic abnormalities in genes controlling the G1 checkpoint can lead to both escape from senescence and cancer formation.

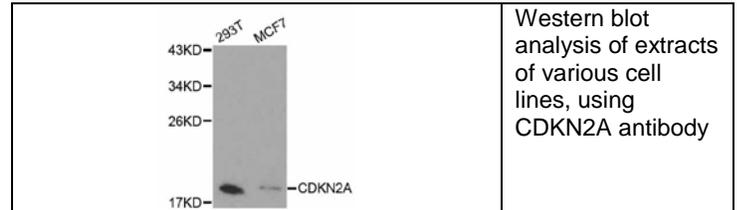
For research use only

Preparation

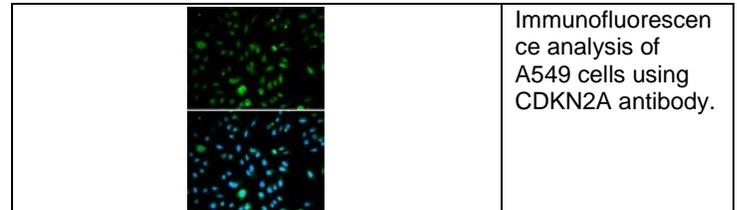
Polyclonal antibody is produced by immunizing rabbit with a synthetic peptide of human CDKN2A and purified using protein A resin.

Applications

Western blot



Immunofluorescence



Storage

This antibody is shipped at 4 °C. This product is stable for 12 months from date of receipt when stored at -20 °C to -70 °C. Avoid freeze/thaw cycles.

Hazard/Biohazard

This antibody contains 0.02% sodium azide as preservative. Please handle and dispose the product properly. No known biohazard is associated with this product.