

Product datasheet for **TA326805**

p16INK4A (CDKN2A) 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
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	C term -peptide of human P16
Formulation:	Store at -20C or -80C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% 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 2A
Database Link:	NP_000068 Entrez Gene 1029 Human Q8N726



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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 p16 binds to CDK4 and inhibits the catalytic activity of the CDK4/cyclin D enzymes. p16 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), p16(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, p16INK4; two tumor-suppressor proteins, p53 and RB and cyclin D1. p16INK4 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.

Synonyms:

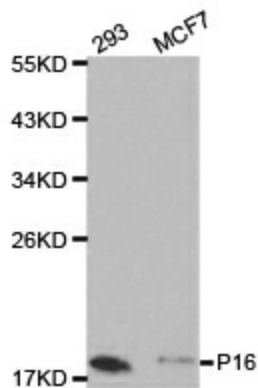
ARF; CDK4I; CDKN2; CMM2; INK4; INK4A; MLM; MTS-1; MTS1; P14; P14ARF; P16; P16-INK4A; P16INK4

Protein Families:

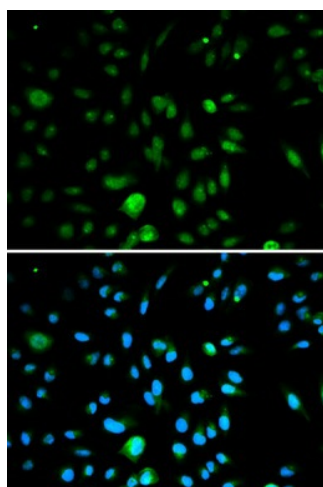
Druggable Genome

Protein Pathways:

Bladder cancer, Cell cycle, Chronic myeloid leukemia, Glioma, Melanoma, Non-small cell lung cancer, p53 signaling pathway, Pancreatic cancer, Pathways in cancer

Product images:

Western blot analysis of extracts of various cell lines, using P16 antibody.



Immunofluorescence analysis of A549 cell using CDKN2A antibody. Blue: DAPI for nuclear staining.