Recombinant Human Cyclin-Dependent Kinase Inhibitor 2A

Human, Recombinant (CDKN2A)
Expressed in *E. coli*
Cat. No. CRP08131
Lot. No. (See product label)

PRODUCT INFORMATION

Description: Cyclin-dependent kinase inhibitors (CDKIs) are proteins that bind to and inhibit the activity of CDKs. Two major classes of CDK inhibitors have been identified. The p16 family (p15, p16, p18 and p19) binds to and inhibits the activities of CDK4 and CDK6. The p21 family (p21, p27, p28 and p57) can bind to broad range of CDK-cyclin complexes and inhibit their activities. CDKIs are capable of suppressing growth, and several lines of evidence strongly suggest that at least some CDKIs may be tumor suppressor proteins.

Amino-Acid Sequence: 156 *aa.* non-glycosylated

M. W. : Approximately 16.5 kDa

Recombinant: Expressed in *E. coli*

Purity: >95% by SDS-PAGE and HPLC analyses.

Formulation: Lyophilized from a 0.2μm filtered concentrated (1mg/ml) solution in 1×PBS,pH 7.4.

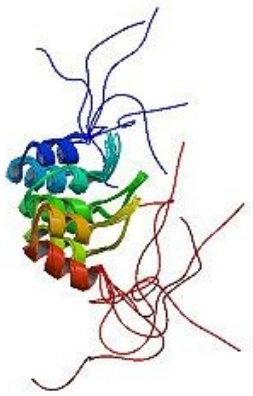
Physical Appearance: Sterile Filtered White lyophilized (freeze-dried) powder.

Endotoxin: Less than 1EU/μg of rHuP16 as determined by LAL method.

Reconstitution: We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/ml. Stock solutions should be apportioned into working aliquots and stored at <-20°C. Further dilutions should be made in appropriate buffered solutions.

Storage: This lyophilized preparation is stable for several weeks at 2-8°C, but should be kept at -20°C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -70°C. Avoid repeated freeze/thaw cycles.

FOR RESEARCH USE ONLY



PDB rendering based on 1a5e.
Available structures: 1a5e, 1bi7, 1dc2, 2a5e

GENE INFORMATION

Gene Name: CDKN2A

Synonmys: ARF; MLM; p14; p16; p19; CMM2; INK4; MTS1; TP16; CDK4I; CDKN2; INK4a; p14ARF; p16INK4; p16INK4a; cyclin-dependent kinase inhibitor 2A (melanoma, p16, inhibits CDK4); CD2A2_HUMAN; Cyclin-dependent kinase inhibitor 2A, isoform 4; p19ARF; MTS-1; p16-INK4; p16-INK4a; CDK4 inhibitor p16-INK4; Cyclin-dependent kinase 4 inhibitor A; Cyclin-dependent kinase inhibitor 2A, isoforms 1/2/3; Multiple tumor suppressor 1; cell cycle negative regulator beta;cyclin-dependent kinase inhibitor 2A; cyclin-dependent kinase inhibitor p16; CDKN2A

mRNA Refseq: NM_000077

Protein Refseq : NP_000068

MIM: 600160

UniProt ID: P42771

Gene ID: 1029

Chromosome Location: 9p21

Pathway: Cell cycle; Chronic myeloid leukemia; Glioma; Melanoma; Non-small cell lung cancer; Pancreatic cancer.

Function: DNA binding;NF-kappaB binding;cyclin-dependent protein kinase inhibitor activit y; protein binding;protein kinase binding; ubiquitin-protein ligase inhibitor activity.

REFERENCES

1.Smith-Sorensen B, Hovig E (1996). CDKN2A (p16INK4A) somatic and germline mutations. Hum. Mutat. 7 (4): 294–303.

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