p16-INK4a Human E. coli

Product Data Sheet

Type: Recombinant
Source: E. coli
Species: Human
Other names: Cyclin-dependent kinase inhibitor 2A, Cyclin-dependent kinase 4 inhibitor A, CDK4I, p16INK4A, p16-INK4, Multiple tumor suppressor 1, MTS-1

Cat. No.:

RBG10260005	(5 µg)
RBG10260020	(20 µg)
RBG10260100	(100 µg)

Description

p16-INK4a is a nuclear protein that regulates the cell cycle by inhibiting cyclin-dependent kinase-4 (CDK4) and CDK6. p16-INK4a inhibits CDK activity by binding to the CDK molecules in a manner that interferes with their ability to interact with cyclin D. This activity has the effect of suppressing tumor formation and growth, and of inducing replicative senescence in various normal cells, including stem cells. The expression of p16-INK4a steadily increases with age, and tends to accumulate in stem cell compartments. The deletion, rearrangement, or mutation of the p16-INK4a gene is frequently found in melanomas, as well as in certain other types of cancer. Recombinant Human p16-INK4a is a 16.5 kDa protein containing 156 amino acid residues. Kim, W.Y. and Sharpless, N.E. (2006) Cell 127(2):265-75.

Research topic

Oncology

Amino Acid Sequence

```
MEPAAGSSME PSADWLATAA ARGRVEEVRA LLEAGALPNA PNSYGRRPIQ VMMMGSARVA ELLLLHGAEP NCADPATLTR
PVHDAAREGF LDTLVVLHRA GARLDVRDAW GRLPVDLAEE LGHRDVARYL RAAAGGTRGS NHARIDAAEG PSDIPD
```

Source

E. coli

Purity

95%

Biological Activity

Data not available.

Endotoxin

Endotoxin level is <0.1 ng/µg of protein (<1EU/µg).

Reconstitution

Centrifuge the vial prior to opening. Reconstitute in 1× PBS, pH 8.0 to a concentration of 0.1-1.0 mg/ml. Do not vortex. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.

Storage, Stability/Shelf Life

-20°C

HEADQUARTERS: BioVendor Laboratorní medicína, a.s.	Karasek 1767/1	621 00 Brno CZECH REPUBLIC	Phone: +420-549-124-185 Fax: +420-549-211-460	E-mail: Web:	info@biovendor.com sales@biovendor.com www.biovendor.com
AUSTRIA: BioVendor GesmbH	Nußdorfer Straße 20/10	1090 Vienna AUSTRIA	Phone: +43-1-89090-25 Fax: +43-1-89090-2515	E-mail:	infoAustria@biovendor.com
GERMANY, SWITZERLAND: BioVendor GmbH	Otto-Hahn-Straße 16	34123 Kassel GERMANY	Phone: +49-6221-433-9100 Fax: +49-6221-433-9111	E-mail:	infoEU@biovendor.com
USA, CANADA AND MEXICO: BioVendor LLC	128 Bingham Rd. Suite 1300	Asheville, NC 28806 USA	Phone: +1-828-575-9250 +1-800-404-7807 Fax: +1-828-575-9251	E-mail:	infoUSA@biovendor.com