Recombinant CDN2A protein (His tag)

Catalog Number	546979
Synonyms	Cyclin-dependent kinase 4 inhibitor A; CDK4I; Multiple tumor suppressor 1; MTS-1; p16-INK4a; p16-INK4; p16INK4A
Species	Human
Expression System	E. coli
Accession	P42771
Molecular Weight	Predictes a molecular mass of 18.18 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 19 kDa band.

Product Information

Sequence Region	1-156
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 1-156 aa (P42771) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human Cyclin-dependent kinase inhibitor 2A (CDKN2A) Fragment (1-156) is a high-purity protein designed for structural and biochemical studies. This fragment represents a stable and soluble unit of the full-length protein, ideal for investigating its role as a key negative regulator of cell proliferation through CDK4 and CDK6 inhibition. Cyclin-dependent kinase inhibitor 2A (CDKN2A), also known as p16-INK4a, functions as a critical negative regulator of normal cell proliferation by strongly interacting with CDK4 and CDK6. This interaction inhibits cyclin D binding and subsequent phosphorylation of the retinoblastoma protein, thereby controlling cell cycle progression. The protein localizes to both the cytoplasm and nucleus, reflecting its dynamic regulatory roles. The provided fragment (1-156) encompasses the complete functional domain, enabling focused analysis of its inhibitory mechanisms and structural features in research applications.