[KO Validated] Anti-CDKN2A/p16INK4a Rabbit pAb

Purified Rabbit Polyclonal Antibody

Catalog # P100080

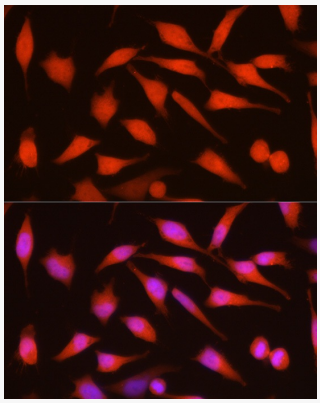
Product Information

Application	WB, IF (Cell)/ICC, ELISA
Reactivity	Human
Dilution	WB 1:2,000~1:10,000; IF 1:50~1:200
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Label	Unconjugated
Immunogen	A synthetic peptide corresponding to a sequence within amino acids 1-156 of human CDKN2A/p16INK4a (NP_000068.1).
Format	Affinity purified polyclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-CDKN2A/p16INK4a Rabbit pAb is for research use only and not for use in diagnostic or therapeutic procedures.

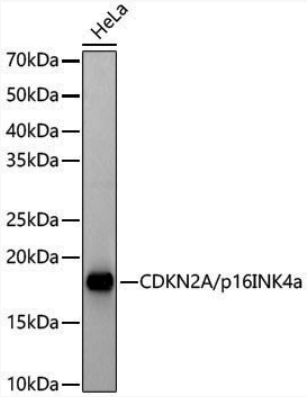
Protein Information

Synonyms	ARF; MLM; P14; P16; P19; CMM2; INK4; MTS1; TP16; CDK4I; CDKN2; INK4A; MTS-1; P14ARF; P19ARF; P16INK4; P16INK4A; P16-INK4A; CDKN2A/p16INK4a.
Calculated MW	Calculated MW: 8 kDa/11 kDa/12 kDa/13 kDa/16 kDa/17 kDa; Observed MW: 16 kDa/17 kDa
Uniprot ID	P42771, Q8N726
Gene ID	1029
Background	This gene generates several transcript variants which differ in their first exons. At least three alternatively spliced variants encoding distinct proteins have been reported, two of which encode structurally related isoforms known to function as inhibitors of CDK4 kinase. The remaining transcript includes an alternate first exon located 20 Kb upstream of the remainder of the gene; this transcript contains an alternate open reading frame (ARF) that specifies a protein which is structurally unrelated to the products of the other variants. This ARF product functions as a stabilizer of the tumor suppressor protein p53 as it can interact with, and sequester, the E3 ubiquitin-protein ligase MDM2, a protein responsible for the degradation of p53. In spite of the structural and functional differences, the CDK inhibitor isoforms and the ARF product encoded by this gene, through the regulatory roles of CDK4 and p53 in cell cycle G1 progression, share a common functionality in cell cycle G1 control. This gene is frequently mutated or deleted in a wide variety of tumors, and is known to be an important tumor suppressor gene.

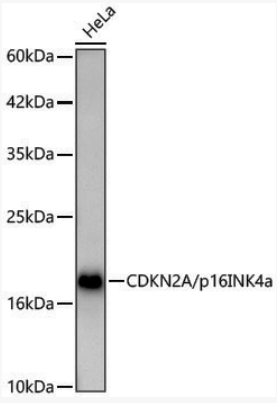
Validation Images



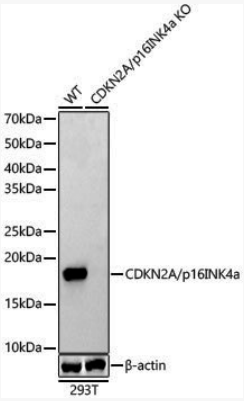
Immunofluorescence analysis of HeLa cells using [KO Validated] CDKN2A/p16INK4a Rabbit pAb (P100080) at dilution of 1:200 (40× lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) at 1:500 dilution. Blue: DAPI for nuclear staining.



Western blot analysis of lysates from HeLa cells, using [KO Validated] CDKN2A/p16INK4a Rabbit pAb (P100080) at 1:1,000 dilution.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (LF102) at 1:10,000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Kit.
Exposure time: 30s.



Western blot analysis of lysates from HeLa cells using [KO Validated] CDKN2A/p16INK4a Rabbit pAb (P100080) at 1:18000 dilution incubated overnight at 4°C.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (LF102) at 1:10,000 dilution.
Lysates/proteins: 25 µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Kit.
Exposure time: 45s.



Western blot analysis of lysates from wild type(WT) and CDKN2A/p16INK4a knockout (KO) 293T(KO) cells, using [KO Validated] CDKN2A/p16INK4a Rabbit pAb (P100080) at 1:1,000 dilution.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (LF102) at 1:10,000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Kit.
Exposure time: 30s.