

ARG67062 anti-p16 antibody [SQab30345]

Package: 100 µl

Summary

Product Description	Recombinant Mouse Monoclonal antibody [SQab30345] recognizes p16
Tested Reactivity	Hu
Tested Application	IHC-P
Host	Mouse
Clonality	Monoclonal
Clone	SQab30345
Target Name	p16
Species	Human
Immunogen	Recombinant protein fragment of p16
Conjugation	Un-conjugated
Alternate Names	CDKN2A; Cyclin Dependent Kinase Inhibitor 2A; P14ARF; CDK4I; MTS1; ARF; P16-INK4A; CDKN2; CMM2; INK4; P16; P19; P14; MLM; Cyclin-Dependent Kinase Inhibitor 2A (Melanoma, P16, Inhibits CDK4); Cyclin-Dependent Kinase 4 Inhibitor A; Cyclin-Dependent Kinase Inhibitor 2A; Multiple Tumor Suppressor 1; Alternative Reading Frame; P16INK4a; P16INK4A; P19Arf; INK4a; MTS-1; Cell Cycle Negative Regulator Beta; CDK4 Inhibitor P16-INK4; Tumor Suppressor ARF; P16-INK4a; P16-INK4; P16INK4; P19ARF; INK4A; TP16

Application Instructions

Application table	Application	Dilution
	IHC-P	1:100-1:200
Application Note	* The dilutions indicate recomme should be determined by the scie	ended starting dilutions and the optimal dilutions or concentrations entist.

Properties

Form	Liquid
Purification	Purification with Protein A.
Buffer	PBS, 0.01% Sodium azide, 40% Glycerol and 0.05% BSA.
Preservative	0.01% Sodium azide
Stabilizer	40% Glycerol and 0.05% BSA
Storage instruction	-20°C
Note	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Bioinformation

Gene Symbol	CDKN2A
Gene Full Name	cyclin-dependent kinase inhibitor 2A
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. [provided by RefSeq, Sep 2012]
Function	Capable of inducing cell cycle arrest in G1 and G2 phases. Acts as a tumor suppressor. Binds to MDM2 and blocks its nucleocytoplasmic shuttling by sequestering it in the nucleolus. This inhibits the oncogenic action of MDM2 by blocking MDM2-induced degradation of p53 and enhancing p53-dependent transactivation and apoptosis. Also induces G2 arrest and apoptosis in a p53-independent manner by preventing the activation of cyclin B1/CDC2 complexes. Binds to BCL6 and down-regulates BCL6-induced transcriptional repression. Binds to E2F1 and MYC and blocks their transcriptional activator activity but has no effect on MYC transcriptional repression. Binds to TOP1/TOPOI and stimulates its activity. This complex binds to rRNA gene promoters and may play a role in rRNA transcription and/or maturation. Interacts with NPM1/B23 and promotes its polyubiquitination and degradation, thus inhibiting rRNA processing. Plays a role in inhibiting ribosome biogenesis, perhaps by binding to the nucleolar localization sequence of transcription termination factor TTF1, and thereby preventing nucleolar localization of TTF1 (By similarity). Interacts with COMMD1 and promotes its 'Lys63'-linked polyubiquitination. Interacts with UBE2I/UBC9 and enhances sumoylation of a number of its binding partners including MDM2 and E2F1. Binds to HUWE1 and represses its ubiquitin ligase activity. May play a role in controlling cell proliferation and apoptosis during mammary gland development. [UniProt]
Calculated Mw	17 kDa
PTM	Acetylation, Phosphoprotein. [UniProt]
Cellular Localization	Cytoplasm, Nucleus. [UniProt]

Images



ARG67062 anti-p16 antibody [SQab30345] IHC-P image

Immunohistochemistry: Human cervical intraepithelial neoplasias stained with ARG67062 anti-p16 antibody [SQab30345] at 1:100 dilution.