

Mouse Cdkn2a Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19228c**Specification**

Mouse Cdkn2a Antibody (Center) - Product Information

Application	WB,E
Primary Accession	Q64364
Other Accession	NP_034007.1
Reactivity	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	19238
Antigen Region	39-65

Mouse Cdkn2a Antibody (Center) - Additional Information**Gene ID** 12578**Other Names**Cyclin-dependent kinase inhibitor 2A, isoform 3, p19ARF, Cdkn2a
{ECO:0000312|EMBL:AAB357701, ECO:0000312|MGI:MGI:104738}**Target/Specificity**

This Mouse Cdkn2a antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 39-65 amino acids from the Central region of mouse Cdkn2a.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Mouse Cdkn2a Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Mouse Cdkn2a Antibody (Center) - Protein Information**Name** Cdkn2a {ECO:0000312|EMBL:AAB35770.1, ECO:0000312|MGI:MGI:104738}**Function** Capable of inducing cell cycle arrest in G1 and G2 phases (PubMed:[8521522](#),

PubMed:[9393858](#)). Acts as a tumor suppressor (PubMed:[8521522](#), PubMed:[9393858](#), PubMed:[15601844](#), PubMed:[17936562](#)). Binds to MDM2 and blocks its nucleocytoplasmic shuttling by sequestering it in the nucleolus (PubMed:[9529248](#), PubMed:[10359817](#)). This inhibits the oncogenic action of MDM2 by blocking MDM2-induced degradation of p53 and enhancing p53-dependent transactivation and apoptosis (PubMed:[10359817](#)). Also induces G2 arrest and apoptosis in a p53-independent manner by preventing the activation of cyclin B1/CDC2 complexes (PubMed:[15361884](#)). Binds to BCL6 and down-regulates BCL6- induced transcriptional repression (PubMed:[15567177](#)). Binds to E2F1 and MYC and blocks their transcriptional activator activity but has no effect on MYC transcriptional repression (By similarity). Binds to TOP1/TOPOI and stimulates its activity (By similarity). This complex binds to rRNA gene promoters and may play a role in rRNA transcription and/or maturation (By similarity). Interacts with NPM1/B23 and promotes its polyubiquitination and degradation, thus inhibiting rRNA processing (By similarity). 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 (PubMed:[20513429](#)). Interacts with COMMD1 and promotes its 'Lys63'-linked polyubiquitination (By similarity). Interacts with UBE2I/UBC9 and enhances sumoylation of a number of its binding partners including MDM2 and E2F1 (By similarity). Binds to HUWE1 and represses its ubiquitin ligase activity (By similarity). May play a role in controlling cell proliferation and apoptosis during mammary gland development (By similarity).

Cellular Location

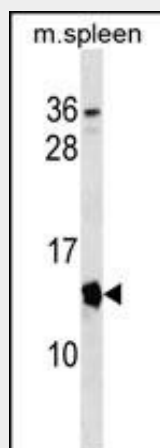
Nucleus, nucleolus {ECO:0000250|UniProtKB:Q8N726, ECO:0000269|PubMed:10359817, ECO:0000269|PubMed:15567177, ECO:0000269|PubMed:15601844, ECO:0000269|PubMed:8521522, ECO:0000305|PubMed:20513429}. Nucleus, nucleoplasm {ECO:0000250|UniProtKB:Q8N726, ECO:0000305|PubMed:20513429}

Mouse Cdkn2a Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Mouse Cdkn2a Antibody (Center) - Images



Mouse Cdkn2a Antibody (Center) (Cat. #AP19228c) western blot analysis in mouse spleen tissue lysates (35ug/lane). This demonstrates the Cdkn2a antibody detected the Cdkn2a protein (arrow).

Mouse Cdkn2a Antibody (Center) - Background

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. 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.

Mouse Cdkn2a Antibody (Center) - References

Nogueira, C., et al. Oncogene 29(47):6222-6232(2010)
Fernandez-Diaz, L.C., et al. Development 137(20):3393-3403(2010)
Bennecke, M., et al. Cancer Cell 18(2):135-146(2010)
Negishi, M., et al. PLoS ONE 5 (8), E12373 (2010) :
Ulanet, D.B., et al. PLoS ONE 5 (8), E12454 (2010) :