

Mouse Cdkn2a Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP19228c**Specification**

Mouse Cdkn2a Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [Q64364](#)**Mouse Cdkn2a Antibody (Center) Blocking Peptide - 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}**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Mouse Cdkn2a Antibody (Center) Blocking Peptide - 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).

target="_blank">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) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

Mouse Cdkn2a Antibody (Center) Blocking Peptide - Images

Mouse Cdkn2a Antibody (Center) Blocking Peptide - 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) Blocking Peptide - 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) :