abcam

ab11048

# Anti-CDKN2A/p14ARF antibody [ARF 4C6/4]

## Key facts

| | |
|---|---|
| **Isotype** | IgG2a |
| **Host species** | Mouse |
| **Storage buffer** | Preservative: 0.02% Sodium azide Constituents: PBS |
| **Form** | Liquid |
| **Clonality** | Monoclonal |
| **Clone number** | ARF 4C6/4 |
| **Purification technique** | Affinity purification Protein A |
| **Concentration** | 1 mg/mL The concentration of this product may be batch-dependent<br>Batch concentration finder → |

## Reactivity data

## Flow Cyt

### Tested

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | 0.5 µg for $10^6$ Cells |
| **Notes** | ab170191 - Mouse monoclonal IgG2a, is suitable for use as an isotype control with this antibody. |

## ICC/IF

### Tested

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | - |
| **Notes** | - |

## Target data

See full target information CDKN2A

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|---|---|
| **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. Isoform smARF. May be involved in regulation of autophagy and caspase-independent cell death; the short-lived mitochondrial isoform is stabilized by C1QBP. |

## Storage

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|---|---|
| **Shipped at conditions** | Blue Ice |
| **Appropriate short-term storage conditions** | +4°C |
| **Appropriate long-term storage conditions** | -20°C |
| **Aliquoting information** | Upon delivery aliquot |
| **Storage information** | Avoid freeze / thaw cycle |

## Product promise

**Tested**

We have tested this species and application combination and it works. It is covered by our product promise.

**Expected**

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

**Predicted**

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

**Not recommended**

We do not recommend this combination. It is not covered by our product promise.

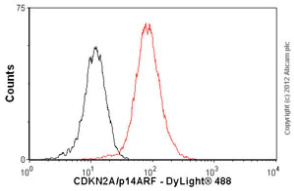
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We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

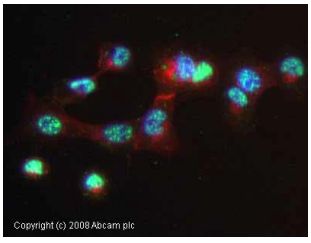
## 2 product images




### Flow Cytometry - Anti-CDKN2A/p14ARF antibody [ARF 4C6/4] (ab11048)

CDKN2A/p14ARF Flow Cytometry staining using mouse Anti-CDKN2A/p14ARF antibody

Overlay histogram showing HeLa cells stained with ab11048 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab11048, 0.5µg/1x$10^6$ cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG2a [ICIGG2A] (ab91361, 1µg/1x$10^6$ cells) used under the same conditions. Acquisition of >5,000 events was performed.




### Immunocytochemistry/ Immunofluorescence - Anti-CDKN2A/p14ARF antibody [ARF 4C6/4] (ab11048)

CDKN2A/p14ARF Immunocytochemistry/ Immunofluorescence staining using mouse Anti-CDKN2A/p14ARF antibody

ICC/IF image of ab11048 stained human MCF7 cells. The cells were 4% PFA fixed (10 min) and then incubated in 1% BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab11048, 1 µg/ml) overnight at +4°C. The secondary antibody (green)

was Alexa Fluor® 488 goat anti-mouse IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue). This antibody also gave a positive IF result in HeLa, Hek293 and HepG2cells.

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