bsm-60307R **[Primary Antibody]**

CDKN2A/p14ARF Recombinant Rabbit mAb

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DATASHEET

Host: Rabbit
Isotype: IgG
Clonality: Recombinant
CloneNo.: F2K1
GeneID: 1029
SWISS: P42771
Target: CDKN2A/p14ARF
Purification: affinity purified by Protein A
Concentration: 1mg/ml
Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

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].

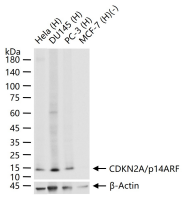
Applications: **WB** (1:500-2000)
ICC/IF (1:50)

Reactivity: Human

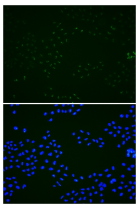
Predicted MW.: 14 kDa

Subcellular Location: Cytoplasm ,Nucleus

VALIDATION IMAGES



25 ug total protein per lane of various lysates (see on figure) probed with CDKN2A/p14ARF monoclonal antibody, unconjugated (bsm-60307R) at 1:1000 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at r.t. for 60 min.



(UPPER PANEL) 4% Paraformaldehyde-fixed Hela (H) cell; Triton X-100 at r.t. for 20 min; Antibody incubation with (CDKN2A/P14arf) monoclonal Antibody, unconjugated (bsm-60307R) 1:50, 90 min at 37°C; followed by conjugated Goat Anti-Rabbit IgG antibody (green, bs-60295G-FITC) at 37°C for 90 min. (LOWER PANEL) DAPI (blue, C02-04002) was used to stain the cell nuclei.

SELECTED CITATIONS

- **[IF=12.5]** Wang Simeng. et al. Loss of CDKN2A Enhances the Efficacy of Immunotherapy in EGFR Mutant Non-Small Cell Lung Cancer. CANCER RES. 2024 Nov;: WB ;Rat,Mouse. 39514336
- **[IF=12.5]** Simeng Wang. et al.Loss of CDKN2A Enhances the Efficacy of Immunotherapy in EGFR-Mutant Non–Small Cell

Lung Cancer.cancer research.2025 Feb 1;85(3):585-601. Western blot ;Human. 39514336