

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

Catalogue number: 151246

Sub-type: Primary antibody

Images:

Contributor

Inventor:

Institute: Cancer Research UK, London Research Institute: Lincoln's Inn Fields

Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: Anti-CDKN2A/p14ARF [ARF 4C6/4]

Alternate name:

Class: Monoclonal

Conjugate: Unconjugated

Description: p14ARF is associated with the regulation of p53 and MDM2 and is deleted or methylated in many human cancers. The gene for CDK2NA generates several transcripts/proteins which differ from each other in their first exons. Three of these transcripts are generated by alternative splicing (isoform 1 a.k.a p16INK4A, isoform 2 and isoform 3 a.k.a p12), two of which are known to function as inhibitors of CDK4 kinase. One other transcript that is generated from this gene contains an alternate reading frame (ARF), with the first exon located 20kb upstream of the remainder of the gene (isoform 4 a.k.a. p14ARF, p19ARF, ARF). In spite of the structural and some functional differences, all the proteins encoded by the CDKN2A gene are involved in cell cycle G1 control.

Purpose:

Parental cell:

Organism:

Tissue:

Model:

Gender:

Isotype: IgG2a

Reactivity: Human

Selectivity:

Host: Mouse

Immunogen: His-tagged p14ARF protein expressed in bacteria.

Immunogen UNIPROT ID:

Sequence:

Growth properties:

Production details:

Formulation:

Recommended controls: BT549 breast cancer cell line.

Bacterial resistance:

Selectable markers:

Additional notes:

Target details

Target: p14 ARF

Target alternate names:

Target background: p14ARF is associated with the regulation of p53 and MDM2 and is deleted or methylated in many human cancers. The gene for CDKN2A generates several transcripts/proteins which differ from each other in their first exons. Three of these transcripts are generated by alternative splicing (isoform 1 a.k.a p16INK4A, isoform 2 and isoform 3 a.k.a p12), two of which are known to function as inhibitors of CDK4 kinase. One other transcript that is generated from this gene contains an alternate reading frame (ARF), with the first exon located 20kb upstream of the remainder of the gene (isoform 4 a.k.a. p14ARF, p19ARF, ARF). In spite of the structural and some function differences, all the proteins encoded by the CDKN2A gene are involved in cell cycle G1 control.

Molecular weight: 14 kDa

Ic50:

Applications

Application: ELISA ; IHC ; IF ; IP ; WB

Application notes:

Handling

Format: Liquid
Concentration: 1 mg/ml
Passage number:
Growth medium:
Temperature:
Atmosphere:
Volume:
Storage medium:
Storage buffer: PBS with 0.02% azide
Storage conditions: -15° C to -25° C
Shipping conditions: Shipping at 4° C

Related tools

Related tools:

References

References: Lee et al. 2012. Evid Based Complement Alternat Med. 2012:702857. PMID: 22701509. ; Inhibition of Cell Growth and Induction of Apoptosis by Antrodia camphorata in HER-2/neu-Overexpressing Breast Cancer Cells through the Induction of ROS, Depletion of HER-2/neu, and Disruption of the PI3K/Akt Signaling Pathway. ; Huang et al. 2008. Cell Cycle. 7(18):2846-55. PMID: 18769144. ; ATM kinase is a master switch for the Delta Np63 alpha phosphorylation/degradation in human head and neck squamous cell carcinoma cells upon DNA damage.