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Anti-p21 CDKN1A Rabbit Monoclonal Antibody

Catalog Number: M00145-2

Overview

Product Name	Anti-p21 CDKN1A Rabbit Monoclonal Antibody
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-p21 CDKN1A Rabbit Monoclonal Antibody catalog # M00145-2. Tested in WB, ICC/IF applications. This antibody reacts with Human, Mouse, Rat.
Application	IF, ICC, WB
Clonality	Monoclonal EAI-3
Formulation	Rabbit IgG in stabilizing components, phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. *This antibody is supplied in a stabilized formulation. Compatibility with conjugation reactions depends on the chemistry of the conjugation method used. For conjugation methods that are not compatible with the stabilizing components present in this formulation, a carrier-free antibody format is required.
Storage Instructions	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P38936

Technical Details

Immunogen	A synthesized peptide derived from human p21
Isotype	Rabbit IgG
Form	Liquid
Concentration	0.5mg/ml
Purification	Affinity-chromatography
Suggested Dilutions	WB 1:500-1:2000 ICC/IF 1:50-1:200

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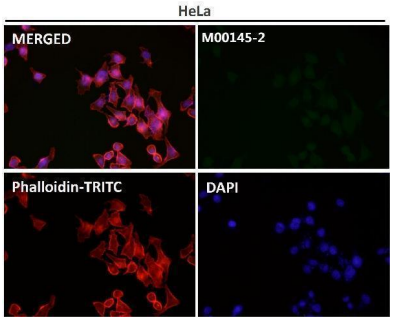
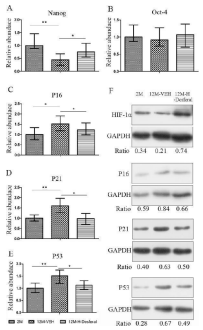
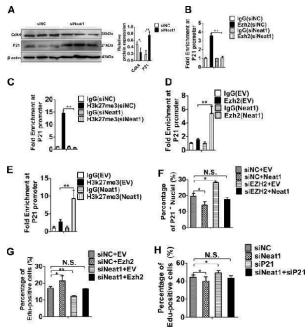
Anti-p21 CDKN1A Rabbit Monoclonal Antibody (M00145-2) Images



Immunofluorescent analysis using the Antibody at 1:150 dilution.



Expression changes of stemness/senescence-associated genes in BMSCs from rats with and without Desferal® treatment. mRNA levels of Nanog (a), Oct-4 (b), P16 (c), P21 (d), and P53 (e) were analyzed by real-time PCR. These data were drawn from three independent experiments and the results were expressed as mean ± SD. * p



Neat1 inhibits P21 expression throngh Ezh2. a Western blotting analysis showing that Neat1 knockdown enhanced P21 protein expression but decreased Cdk4 protein expression in C2C12 cells. The relative protein levels of P21 and Cdk4 were quantified using ImageJ software. b , c ChIP-qPCR results revealed that the enrichments of Ezh2 (b) and H3k27me3 (c) at the P21 promoter were significantly decreased after Neat1 knockdown. d , e ChIP-qPCR results revealed that the enrichments of Ezh2 (d) and H3k27me3 (e) at the P21 promoter were significantly increased after Neat1 overexpression. f Co-transfection of Ezh2 siRNA fragment and Neat1 expression vector in C2C12 cells for 2 days. Immunofluorescence staining of P21 was performed, and P21 expression was quantified by ImageJ. The quantification of P21 immunofluorescence staining results showed that the overexpression of Neat1 inhibited P21 protein expression, but had no significant effect on P21 expression after co-transfection with Ezh2 siRNA fragment. g Neat1 siRNA fragment and Ezh2 expression vector were co-transfected into C2C12 cells and the cells were performed with EdU staining at 2 days after transfection. The percentage of EdU + cells was quantified. The quantification of EdU staining results showed that Neat1 knockdown inhibited myoblast proliferation. After co-transfected with Ezh2 expression vector, Neat1 knockdown can not inhibit myoblast proliferation. h Neat1 and P21 siRNA fragments were co-transfected into C2C12 cells and the cells were performed with EdU staining at 2 days after transfection. The quantification of EdU staining results showed that Neat1 knockdown significantly reduced the percentage of EdU + cells, but did not reduce the number of EdU + cells after co-

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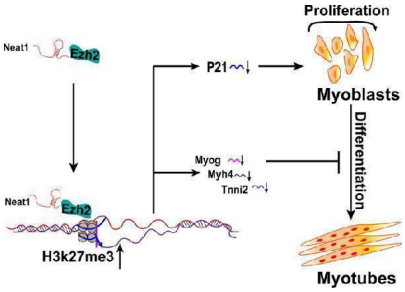
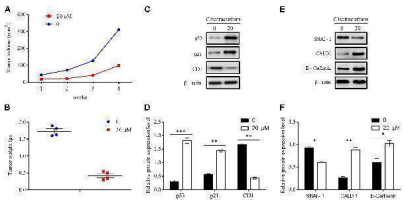
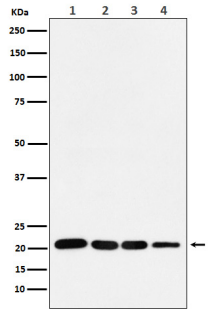
transfection with P21 siRNA fragment. Protein levels were normalized to those of beta-actin. All values represent the mean ± s.d. of three independent experiments. * p



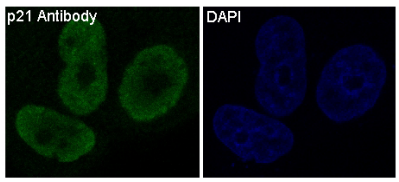
Schematic model of Neat1 regulation in myogenesis. In proliferating myoblasts, Neat1 guides Ezh2 to the P21 promoter and inhibits P21 expression, leading to the promotion of myoblast proliferation. Upon differentiation, Neat1 recruits Ezh2 to inhibit the expression of muscle-specific genes, such as Myog , Myh4 , and Tnni2 , and suppresses myogenic differentiation Index in PubMed under a CC BY license. PMID: 31243262



(A–F) Cisatracurium inhibits metastatic ability of CRC in vivo . (A) Line graph of subcutaneous tumor volume. (B) Weight of subcutaneous tumors in grams. Data are expressed as mean tumor volume or weight ± SE. ∗ p < 0.05. (C–F) Representative densities of tumor viability and migration regulatory proteins (p53, p21 and CD1, SNAI-1, CALD1, E-Cadherin) in tumor tissue samples. beta-Actin was used as internal control. The cluster bar chats in (D , F) indicates the levels of viability and migration regulatory proteins in the treatment group. Data are expressed as Mean ± SEM (n = 3). ∗ p < 0.05, ∗∗ p < 0.01, ∗∗∗ p < 0.001 versus control.Index in PubMed under a CC BY license. PMID: 30108509



Western blot analysis of p21 in (1) MCF-7 cell lysate; (2) HeLa cell lysate. (3) LnCap cell lysate; (4) U87 MG cell lysate.



Immunofluorescent analysis of MCF7 cells, using p21 Antibody.

9 Publications Citing This Product

1. PubMed ID: 33902600, Chen Q,Fu L,Hu J,Guo G,Xie A.Silencing of PSMC2 inhibits development and metastasis of prostate cancer through regulating proliferation, apoptosis and migration.Cancer Cell Int.2021 Apr 26;21(1):235.doi:10.1186/s12935-021-01934-8.PMID:33902600;PMCID:PMC8077794.

2. PubMed ID: -, Lu Kong,Yongya Wu,Wangcheng Hu,Lin Liu,Yuying Xue,Geyu Liang,Mechanisms underlying reproductive toxicity induced by nickel nanoparticles identified by comprehensive gene expression analysis in GC-1 spg cells,Environmental Pollution,2021,116556,ISSN 0269-7

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3. PubMed ID: 33413663, Yi L,Ju Y,He Y,Yin X,Xu Y,Weng T.Intraperitoneal injection of Desferal® alleviated the age-related bone loss and senescence of bone marrow stromal cells in rats.Stem Cell Res Ther.2021 Jan 7;12(1):45.doi:10.1186/s13287-020-02112-9.PMID:33413663;PMCID:PMC7

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