

# Recombinant Human p21 protein ab56278

**2 References**   [2 图像](#)

<b>描述</b>	
产品名称	重组人p21蛋白
纯度	> 80 % SDS-PAGE.
表达系统	Escherichia coli
蛋白长度	Full length protein
无动物成分	No
性质	Recombinant
种属	Human
标签	GST tag N-Terminus
<b>技术指标</b>	
Our <b>Abpromise guarantee</b> covers the use of <b>ab56278</b> in the following tested applications.	
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.	
应用	Functional Studies SDS-PAGE Western blot
形式	Liquid
<b>制备和贮存</b>	
稳定性和存储	Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles. pH: 7.50 Constituents: 0.0038% EGTA, 0.00174% PMSF, 0.00385% DTT, 0.79% Tris HCl, 0.00292% EDTA, 25% Glycerol (glycerin, glycerine), 0.87% Sodium chloride
<b>常规信息</b>	
功能	May be the important intermediate by which p53/TP53 mediates its role as an inhibitor of cellular proliferation in response to DNA damage. Binds to and inhibits cyclin-dependent kinase activity,

preventing phosphorylation of critical cyclin-dependent kinase substrates and blocking cell cycle progression. Functions in the nuclear localization and assembly of cyclin D-CDK4 complex and promotes its kinase activity towards RB1. At higher stoichiometric ratios, inhibits the kinase activity of the cyclin D-CDK4 complex.

#### 组织特异性

Expressed in all adult human tissues, with 5-fold lower levels observed in the brain.

#### 序列相似性

Belongs to the CDI family.

#### 结构域

The PIP-box K+4 motif mediates both the interaction with PCNA and the recruitment of the DCX(DTL) complex: while the PIP-box interacts with PCNA, the presence of the K+4 submotif, recruits the DCX(DTL) complex, leading to its ubiquitination.

The C-terminal is required for nuclear localization of the cyclin D-CDK4 complex.

#### 翻译后修饰

Phosphorylation of Thr-145 by Akt or of Ser-146 by PKC impairs binding to PCNA.

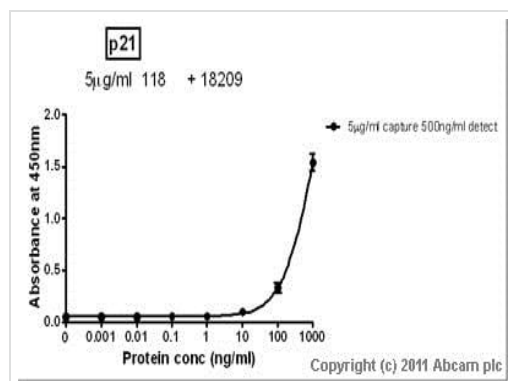
Phosphorylation at Ser-114 by GSK3-beta enhances ubiquitination by the DCX(DTL) complex.

Ubiquitinated by MKRN1; leading to polyubiquitination and 26S proteasome-dependent degradation. Ubiquitinated by the DCX(DTL) complex, also named CRL4(CDT2) complex, leading to its degradation during S phase or following UV irradiation. Ubiquitination by the DCX(DTL) complex is essential to control replication licensing and is PCNA-dependent: interacts with PCNA via its PIP-box, while the presence of the containing the 'K+4' motif in the PIP box, recruit the DCX(DTL) complex, leading to its degradation.

#### 细胞定位

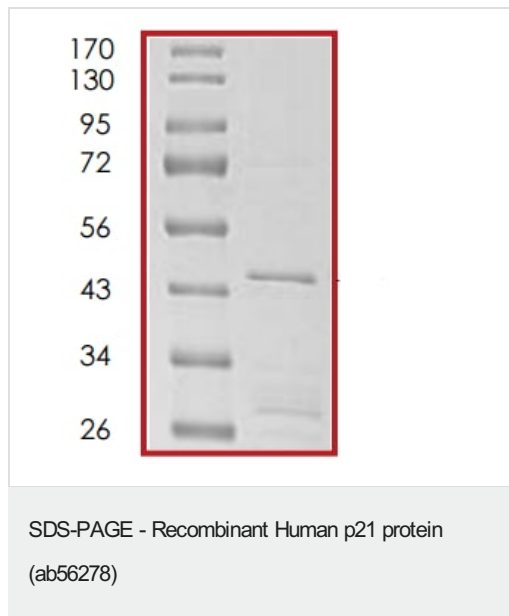
Cytoplasm. Nucleus.

#### 图片



Standard curve for p21 (Analyte: ab56278); dilution range 1pg/ml to 1µg/ml using Capture Antibody Mouse monoclonal [AC8.3] to p21 (**ab118**) at 5µg/ml and Detector Antibody Rabbit polyclonal to p21 (**ab18209**) at 0.5µg/ml.

Sandwich ELISA - Recombinant Human p21 protein  
(ab56278)



SDS-PAGE analysis of ab56278 with molecular weight markers.  
Approximate molecular weight 46kDa.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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