abcam

Product datasheet

Recombinant Human p21 protein (denatured) ab134524

1 图像

描述

产品名称	重组人p21蛋白(denatured)
纯度	> 85 % SDS-PAGE.
表达系统	Escherichia coli
Accession	P38936
蛋白长度	Full length protein
无动物成分	No
性质	Recombinant
种属	Human
序列	MGSSHHHHHHSSGLVPRGSHMSEPAGDVRQNPCGSKACRRLF GPVDSEQL SRDCDALMAGCIQEARERWNFDFVTETPLEGDFAWERVRGLG LPKLYLPT GPRRGRDELGGGRRPGTSPALLQGTAEEDHVDLSLSCTLVPR SGEQAEGS PGGPGDSQGRKRRQTSMTDFYHSKRRLIFSKRKP
预测分子量	20 kDa including tags
氨基酸	1 to 164
标签	His tag N-Terminus
描述	重组人p21蛋白

技术指标

Our **Abpromise guarantee** covers the use of **ab134524** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

应用	SDS-PAGE
形式	Liquid

制备和贮存

稳定性和存储	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

pH: 8.00
Constituents: 12.01% Urea, 0.32% Tris HCl, 10% Glycerol (glycerin, glycerine), 0.58% Sodium chloride

常规信息

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 recuitment 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.

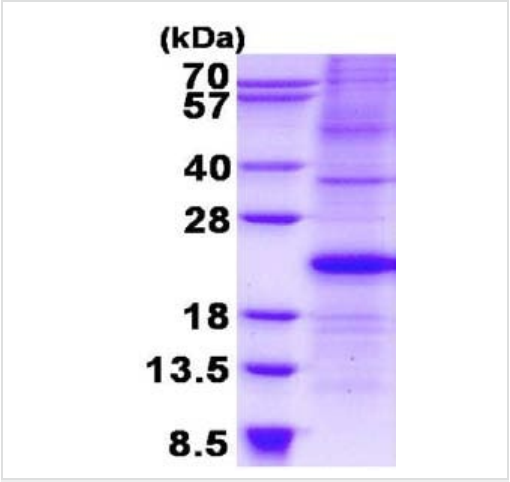
翻译后修饰

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



SDS-PAGE - Recombinant Human p21 protein (denatured) (ab134524)

15% SDS-PAGE analysis of 3 µg ab134524.

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

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