abcam

Product datasheet

Anti-p21 (phospho T145) antibody ab47300

★★★★★ 1 Abreviews 14 References 画像数 3

製品の概要

製品名 Anti-p21 (phospho T145) antibody

製品の詳細 Rabbit polyclonal to p21 (phospho T145)

由来種 Rabbit

アプリケーション 適用あり: ICC/IF, WB, IHC-P

種交差性 交差種: Human

免疫原 Synthetic peptide corresponding to Human p21 aa 100-200 (phospho T145).

Database link: P38936

ポジティブ・コントロール Human breast carcinoma tissue and EGF treated HeLa cell extracts

特記事項

p21Cip1 (phospho-Thr145) antibody detects endogenous levels of p21Cip1 only when

phosphorylated at threonine 145.

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

バッファー pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: PBS, 50% Glycerol, 0.87% Sodium chloride

精製度 Immunogen affinity purified

特記事項(精製) The antibody was purified using epitope-specific phosphopeptide. The antibody against non-

phosphopeptide was removed by chromatography using non-phosphopeptide corresponding to

the phosphorylation site.

一次抗体 備考 p21Cip1 (phospho-Thr145) antibody detects endogenous levels of p21Cip1 only when

phosphorylated at threonine 145.

ポリ/モノ ポリクローナル

アイソタイプ IgG

アプリケーション

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab47300の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
ICC/IF		Use a concentration of 1 µg/ml.
WB		1/500 - 1/1000. Detects a band of approximately 32 kDa (predicted molecular weight: 18 kDa).
IHC-P	★★★★☆ (1)	Use at an assay dependent concentration.

ターゲット情報

機能 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.

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

配列類似性 Belongs to the CDI family.

ドメイン 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.

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

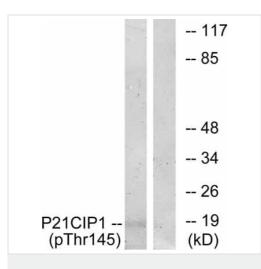
Phosphorylation at Ser-114 by GSK3-beta enhances ubiquitination by the DCX(DTL) complex. Ubiquitinated by MKRN1; leading to polyubiquitination and 26S proteasome-dependent degradation. Ubiquitinated by the DCX(DTL) complex, also named CRL4(CDT2) complex, leading to its degradation during S phase or following 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.

細胞内局在 Cytoplasm. Nucleus.

画像



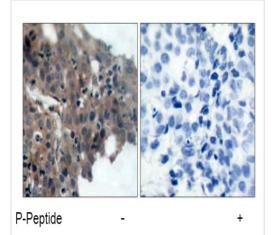
Western blot - Anti-p21 (phospho T145) antibody (ab47300)

All lanes: Anti-p21 (phospho T145) antibody (ab47300)

Lane 1: EGF treated HeLa cells

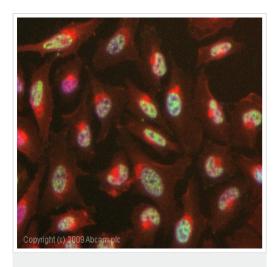
Lane 2: HeLa cells

Predicted band size: 18 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-p21 (phospho T145) antibody (ab47300)

ab47300 staining human breast carcinoma tissue by IHC-P (left hand panel). The right hand panel shows staining in the presence of phospho-peptide.



Immunocytochemistry/ Immunofluorescence - Antip21 (phospho T145) antibody (ab47300)

ICC/IF image of ab47300 stained HeLa cells. The cells were 4% PFA fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab47300, 1µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit lgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

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