abcam

Product datasheet

Anti-PCNA antibody ab15497

63 References 4 图像

概述

产品名称 Anti-PCNA抗体

描述 兔多克隆抗体to PCNA

宿主 Rabbit

经测试应用 适用于: ICC/IF, WB, IHC-P

种属反应性 与反应: Human

预测可用于: Mouse, Rat 🔷

免疫原 Recombinant full length protein corresponding to Human PCNA.

Database link: P12004

常规说明 This product is FOR RESEARCH USE ONLY. For commercial use, please contact

partnerships@abcam.com.

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

性能

形式 Liquid

存放说明 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Avoid freeze / thaw cycle.

存储溶液 pH: 7.60

Preservative: 0.1% Sodium azide Constituents: PBS, 1% BSA

纯**度** Immunogen affinity purified

克隆 多克隆

同种型 lgG

The Abpromise guarantee

Abpromise™承诺保证使用ab15497于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
ICC/IF		Use a concentration of 5 µg/ml.
WB		Use a concentration of 1 µg/ml. Detects a band of approximately 29 kDa (predicted molecular weight: 29 kDa).
IHC-P		1/100. No special pretreatment required but maybe performed for optimum results in immunohistochemical staining of formalin/paraffin tissues.

功能

This protein is an auxiliary protein of DNA polymerase delta and is involved in the control of eukaryotic DNA replication by increasing the polymerase's processibility during elongation of the leading strand. Induces a robust stimulatory effect on the 3'-5' exonuclease and 3'-phosphodiesterase, but not apurinic-apyrimidinic (AP) endonuclease, APEX2 activities. Has to be loaded onto DNA in order to be able to stimulate APEX2.

序列相似性

翻译后修饰

Belongs to the PCNA family.

Upon methyl methanesulfonate-induced DNA damage, mono-ubiquitinated by the UBE2B-RAD18 complex on Lys-164. This induces non-canonical polyubiquitination on Lys-164 through 'Lys-63' linkage of ubiquitin moieties by the E2 complex UBE2N-UBE2V2 and the E3 ligases, HLTF, RNF8 and SHPRH, which is required for DNA repair. 'Lys-63' polyubiquitination prevents genomic instability on DNA damage. Monoubiquitination at Lys-164 also takes place in undamaged proliferating cells, and is mediated by the DCX(DTL) complex, leading to enhance

PCNA-dependent translesion DNA synthesis.

Acetylated in response to UV irradiation. Acetylation disrupts interaction with NUDT15 and

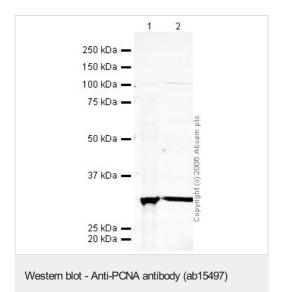
promotes degradation.

细胞定位 Nucleus. Forms nuclear foci representing sites of ongoing DNA replication and vary in

morphology and number during S phase. Together with APEX2, is redistributed in discrete

nuclear foci in presence of oxidative DNA damaging agents.

图片



All lanes: Anti-PCNA antibody (ab15497) at 1 µg/ml

Lane 1 : HeLa (Human epithelial carcinoma cell line) Nuclear

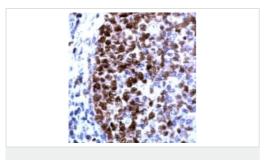
Lane 2 : HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate

Lysates/proteins at 20 µg per lane.

Secondary

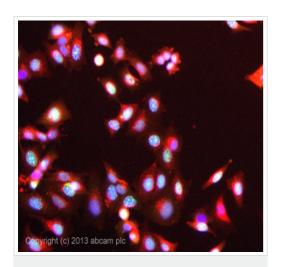
All lanes : IRDye 680 conjugated goat anti-rabbit IgG (H&L) at 1/15000 dilution

Predicted band size: 29 kDa



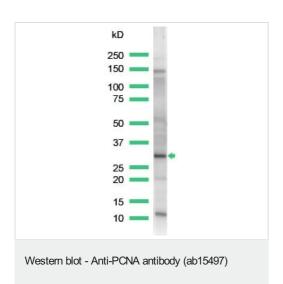
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-PCNA antibody (ab15497)

ab15497 staining PCNA in Human tonsil tissue by Immunohistochemisty (Formalin/PFA-fixed paraffin-embedded sections).



Immunocytochemistry/ Immunofluorescence - Anti-PCNA antibody (ab15497)

ICC/IF image of ab15497 stained MCF7 cells. The cells were 100% methanol fixed (5 min) and then incubated in 1%BSA / 10% normal goat serum <u>ab7481</u> / 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 ab15497, 5μg/ml) overnight at +4°C. The secondary antibody (green) was <u>ab96899</u>, DyLight® 488 goat anti-rabbit lgG(H+L) used at a 1/250 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.



Anti-PCNA antibody (ab15497) at 1/25 dilution + Raji cell lysate

Predicted band size: 29 kDa
Observed band size: 29 kDa

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

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