abcam

Product datasheet

Anti-MDM2 antibody - ChIP Grade ab226939

★★★★★ 3 Abreviews 4 References 8 图像

概述

产品名称 Anti-MDM2抗体- ChIP Grade

描述 兔多克隆抗体to MDM2 - ChIP Grade

宿主 Rabbit

经测试应用 适用于: WB, IP, IHC-P, ChIP

种属反应性 与反应: Mouse, Human

预测可用于: Cow, Cat, Dog, Pig, Rhesus monkey 🔼

免疫原 Recombinant fragment within Human MDM2 (internal sequence). The exact immunogen

sequence used to generate this antibody is proprietary information. If additional detail on the immunogen is needed to determine the suitability of the antibody for your needs, please **contact**

our Scientific Support team to discuss your requirements.

Database link: **Q00987-1**

阳性对照 WB: Neuro-2a, GL261, C8D30, NIH/3T3, RAW 264.7, BCL-1, C2C12, Jurkat, Raji and NCIH-929

whole cell extracts; MDM2 transfected HEK-293T whole cell extract; HepG2, starved for 16 hours, whole cell extract. IP: Jurkat whole cell extract. IHC-P: Human lung and lung cancer tissues. ChIP:

PC-3 chromatin extract.

常规说明

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 long

term. Avoid freeze / thaw cycle.

存储溶液 pH: 7.00

Preservative: 0.025% Proclin 300

Constituents: 79% PBS, 20% Glycerol (glycerin, glycerine)

1

纯**度** Immunogen affinity purified

克隆 多克隆

同种型 lgG

应用

The Abpromise guarantee Abpromise™承诺保证使用ab226939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 |
|-------|------------------------|---|
| WB | ★★★★ <u>(1)</u> | 1/500 - 1/3000. Predicted molecular weight: 55 kDa. |
| IP | | 1/100 - 1/500. |
| IHC-P | ★★★★☆ (1) | 1/100 - 1/1000. |
| ChIP | | Use at an assay dependent concentration. |

靶标

功能

E3 ubiquitin-protein ligase that mediates ubiquitination of p53/TP53, leading to its degradation by the proteasome. Inhibits p53/TP53- and p73/TP73-mediated cell cycle arrest and apoptosis by binding its transcriptional activation domain. Also acts as an ubiquitin ligase E3 toward itself and ARRB1. Permits the nuclear export of p53/TP53. Promotes proteasome-dependent ubiquitin-independent degradation of retinoblastoma RB1 protein. Inhibits DAXX-mediated apoptosis by inducing its ubiquitination and degradation. Component of the TRIM28/KAP1-MDM2-p53/TP53 complex involved in stabilizing p53/TP53. Also component of the TRIM28/KAP1-ERBB4-MDM2 complex which links growth factor and DNA damage response pathways.

组织特异性

Ubiquitous. Isoform Mdm2-A, isoform Mdm2-B, isoform Mdm2-C, isoform Mdm2-D, isoform Mdm2-E, isoform Mdm2-F and isoform Mdm2-G are observed in a range of cancers but absent in normal tissues.

疾病相关

Note=Seems to be amplified in certain tumors (including soft tissue sarcomas, osteosarcomas and gliomas). A higher frequency of splice variants lacking p53 binding domain sequences was found in late-stage and high-grade ovarian and bladder carcinomas. Four of the splice variants show loss of p53 binding.

序列相似性

Belongs to the MDM2/MDM4 family.
Contains 1 RanBP2-type zinc finger.
Contains 1 RING-type zinc finger.
Contains 1 SWIB domain.

结构域

Region I is sufficient for binding p53 and inhibiting its G1 arrest and apoptosis functions. It also binds p73 and E2F1. Region II contains most of a central acidic region required for interaction with ribosomal protein L5 and a putative C4-type zinc finger. The RING finger domain which coordinates two molecules of zinc interacts specifically with RNA whether or not zinc is present and mediates the heterooligomerization with MDM4. It is also essential for its ubiquitin ligase E3 activity toward p53 and itself.

翻译后修饰

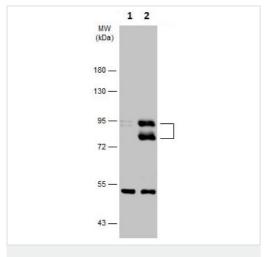
Phosphorylated in response to ionizing radiation in an ATM-dependent manner.

Auto-ubiquitinated; which leads to proteasomal degradation. Deubiquitinated by USP2 leads to its accumulation and increases deubiquitinilation and degradation of p53/TP53. Deubiquitinated by USP7; leading to stabilize it.

细胞定位

Nucleus > nucleoplasm. Cytoplasm. Nucleus > nucleolus. Expressed predominantly in the nucleoplasm. Interaction with ARF(P14) results in the localization of both proteins to the nucleolus. The nucleolar localization signals in both ARF(P14) and MDM2 may be necessary to allow efficient nucleolar localization of both proteins. Colocalizes with RASSF1 isoform A in the nucleus.

图片



Western blot - Anti-MDM2 antibody - ChIP Grade (ab226939)

All lanes : Anti-MDM2 antibody - ChIP Grade (ab226939) at 1/2000 dilution

Lane 1 : HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell extract

Lane 2 : MDM2 transfected HEK-293T whole cell extract

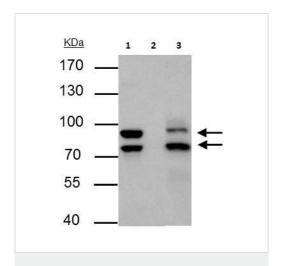
Lysates/proteins at 30 µg per lane.

Secondary

All lanes: HRP-conjugated anti-rabbit lgG

Predicted band size: 55 kDa

7.5% SDS-PAGE gel.



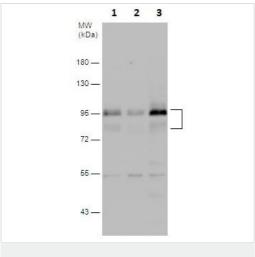
Immunoprecipitation - Anti-MDM2 antibody - ChIP Grade (ab226939) MDM2 was immunoprecipitated from Jurkat (human T cell leukemia cell line from peripheral blood) whole cell extract with 4 μ g ab226939. Western blot was performed from the immunoprecipitate using ab226939 at 1/500 dilution.

Lane 1: Jurkat whole cell extract 30 µg (Input).

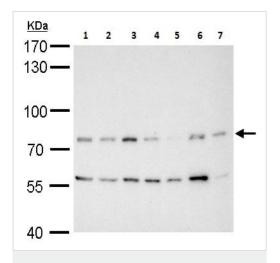
Lane 2: Control IP in Jurkat whole cell extract with 4 μg of preimmune Rabbit IgG.

Lane 3: ab226939 IP in Jurkat whole cell extract.

7.5 % SDS-PAGE gel.



Western blot - Anti-MDM2 antibody - ChIP Grade (ab226939)



Western blot - Anti-MDM2 antibody - ChIP Grade (ab226939)

All lanes: Anti-MDM2 antibody - ChIP Grade (ab226939) at 1/1000 dilution

Lane 1: Jurkat (human T cell leukemia cell line from peripheral blood) whole cell extract

Lane 2: Raji (human Burkitt's lymphoma cell line) whole cell extract

Lane 3: NHI-H929 whole cell extract

Lysates/proteins at 30 µg per lane.

Predicted band size: 55 kDa

7.5% SDS-PAGE gel.

All lanes: Anti-MDM2 antibody - ChIP Grade (ab226939) at 1/1000 dilution

Lane 1: Neuro-2a (mouse neuroblastoma cell line) whole cell extract

Lane 2: GL261 whole cell extract

Lane 3: C8D30 whole cell extract

Lane 4: NIH/3T3 (mouse embryo fibroblast cell line) whole cell

extract

Lane 5: BCL-1 whole cell extract

Lane 6: RAW 264.7 (mouse macrophage cell line transformed

with Abelson murine leukemia virus) whole cell extract

Lane 7: C2C12 (mouse myoblast cell line) whole cell extract

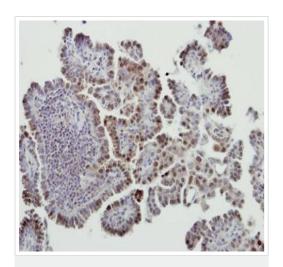
Lysates/proteins at 30 µg per lane.

Secondary

All lanes: HRP-conjugated anti-rabbit lgG

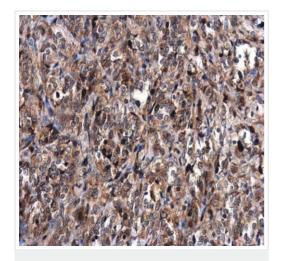
Predicted band size: 55 kDa

7.5% SDS-PAGE gel.



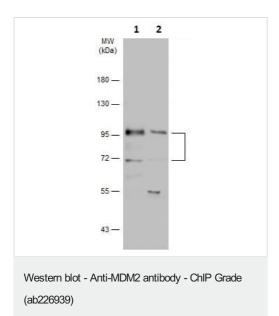
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-MDM2 antibody - ChIP Grade (ab226939)

Paraffin-embedded human lung cancer tissue stained for MDM2 with ab226939 at 1/500 dilution in immunohistochemical analysis.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-MDM2 antibody - ChIP Grade (ab226939)

Paraffin-embedded human lung tissue stained for MDM2 with ab226939 at 1/500 dilution in immunohistochemical analysis.



All lanes : Anti-MDM2 antibody - ChIP Grade (ab226939) at 1/3000 dilution

Lane 1: HepG2 (human liver hepatocellular carcinoma cell line), starved for 16 hours, whole cell extract

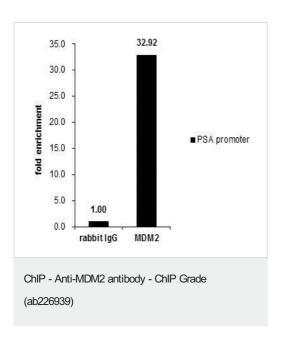
Lane 2: HepG2, starved for 16 hours and treated with 1 uM staurosporine for 24 hours, whole cell extract

Lysates/proteins at 30 µg per lane.

Secondary

All lanes: HRP-conjugated anti-rabbit lgG

Predicted band size: 55 kDa



7.5% SDS-PAGE gel.

Cross-linked ChIP was performed with PC-3 (human prostate adenocarcinoma cell line) chromatin extract and 5 μ g of either control rabbit lgG or ab226939. The precipitated DNA was detected by PCR with primer set targeting to PSA promoter.

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