abcam

Product datasheet

Anti-MDM2 (phospho S166) antibody [EPR1450(2)] ab170880

リコンビナント RabMAb

11 References 画像数 6

製品の概要

製品名	Anti-MDM2 (phospho S166) antibody [EPR1450(2)]
製品の詳細	Rabbit monoclonal [EPR1450(2)] to MDM2 (phospho S166)
由来種	Rabbit
アプリケーション	**適用あり:** WB, IHC-P, Dot blot **適用なし:** Flow Cyt,ICC/IF or IP
種交差性	**交差種:** Human **交差が予測される動物種:** Rat **非交差種:** Mouse
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	MCF-7 cell lysates treated with IGF-1, Human gastric carcinoma tissue and Human placenta tissue
特記事項	This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

製品の特性

製品の状態	Liquid
保存方法	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.
バッファー	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant
精製度	Tissue culture supernatant
ポリ/モノ	モノクローナル

クローン名	EPR1450(2)
アイソタイプ	IgG

アプリケーション

The Abpromise guarantee **Abpromise保証は、次のテスト済みアプリケーションにおけるab170880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
WB		1/50000 - 1/200000. Predicted molecular weight: 55 kDa.
IHC-P		1/50 - 1/100. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
Dot blot		1/1000.

追加情報 Is unsuitable for Flow Cyt,ICC/IF or IP.

ターゲット情報

機能 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.

組織特異性 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.

関連疾患 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.

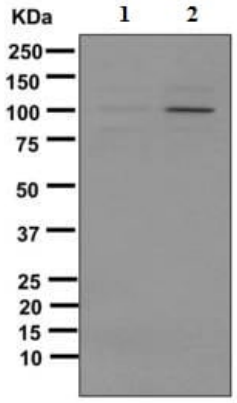
配列類似性 Belongs to the MDM2/MDM4 family.
Contains 1 RanBP2-type zinc finger.
Contains 1 RING-type zinc finger.
Contains 1 SWIB domain.

ドメイン 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.

翻訳後修飾 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.
細胞内局在	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.

画像



Western blot - Anti-MDM2 (phospho S166) antibody [EPR1450(2)] (ab170880)

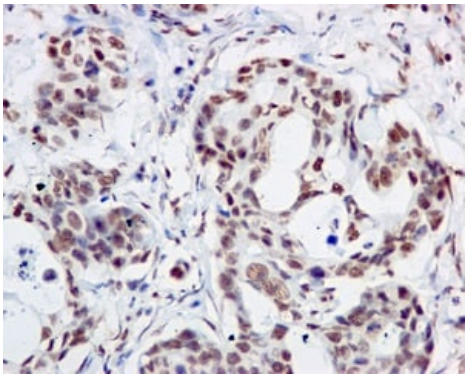
All lanes : Anti-MDM2 (phospho S166) antibody [EPR1450(2)] (ab170880) at 1/50000 dilution

Lane 1 : MCF7 cell lysate
Lane 2 : MCF7 cell lysate treated with IGF-1

Lysates/proteins at 10 µg per lane.

Secondary
All lanes : HRP labelled goat anti-rabbit IgG at 1/2000 dilution

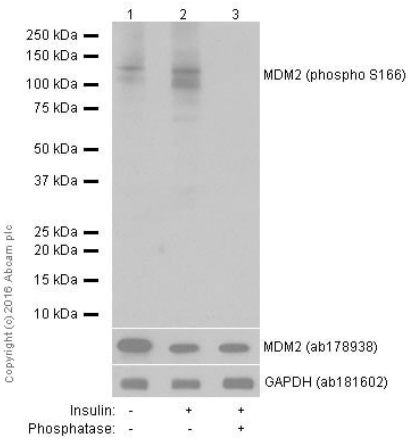
Predicted band size: 55 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MDM2 (phospho S166) antibody [EPR1450(2)] (ab170880)

Immunohistochemical analysis of paraffin-embedded human gastric carcinoma tissue labeling MDM2 (phospho S166) using ab170880 at a 1/50 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Western blot - Anti-MDM2 (phospho S166) antibody [EPR1450(2)] (ab170880)

All lanes : Anti-MDM2 (phospho S166) antibody [EPR1450(2)] (ab170880) at 1/100000 dilution

Lane 1 : A549 (Human lung carcinoma epithelial cell) whole cell lysate
Lane 2 : A549 (Human lung carcinoma epithelial cell) treated with insulin at 1ug/ml for 150 minutes. Whole cell lysate
Lane 3 : A549 (Human lung carcinoma epithelial cell) treated with insulin at 1ug/ml for 150 minutes. Whole cell lysate. Then the membrane was incubated with phosphatase

Lysates/proteins at 15 µg per lane.

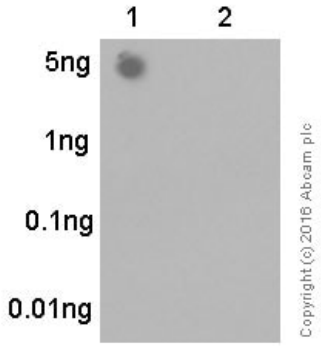
Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

Predicted band size: 55 kDa
Observed band size: 90-140 kDa

Exposure time: 5 seconds

Diluting and blocking buffer: 2% BSA/TBST

The molecular weight is the same with the one from this paper PMID: 25392082

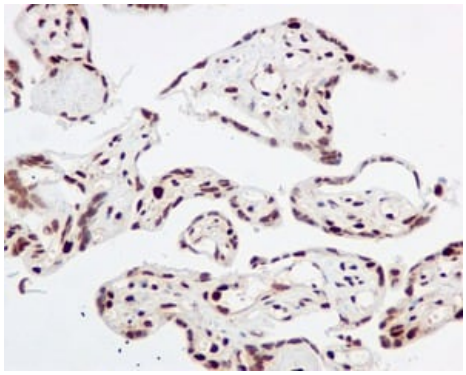


Dot Blot - Anti-MDM2 (phospho S166) antibody [EPR1450(2)] (ab170880)

Dot blot analysis of MDM2 (phospho S166) phospho peptide (Lane 1), MDM2 non-phospho peptide (Lane 2), labeling MDM2 (phospho S166) with ab170880 at a dilution of 1/1000. Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ab97051) was used as the secondary antibody at a dilution of 1/100000.

Blocking and dilution buffer: 5% NFDM/TBST.

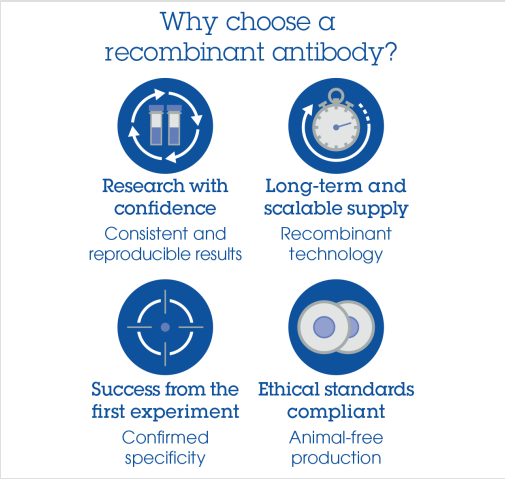
Exposure time: 3 minutes.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MDM2 (phospho S166) antibody [EPR1450(2)] (ab170880)

Immunohistochemical analysis of paraffin-embedded human placenta tissue labeling MDM2 (phospho S166) using ab170880 at a 1/50 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Anti-MDM2 (phospho S166) antibody [EPR1450(2)]

(ab170880)

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