# abcam

### Product datasheet

## Anti-RPA32/RPA2 (phospho T21) antibody [EPR2846(2)] ab109394

יעלאעבע RabMAb

#### 1 Abreviews 26 References 画像数 9

#### 製品の概要

製品名 Anti-RPA32/RPA2 (phospho T21) antibody [EPR2846(2)]

製品の詳細 Rabbit monoclonal [EPR2846(2)] to RPA32/RPA2 (phospho T21)

由来種 Rabbit

特異性 ab109394 only detects RPA32/RPA2 phosphorylated at threonine 21. The antibody has been

tested with milk (5%) and BSA (2%) as blocking reagents, but it provided better results with 5%

milk.

This antibody cross-reactivates with non-phospho substrate in specific situations.

アプリケーション 適用あり: Dot blot, WB, ELISA

適用なし: Flow Cyt,ICC/IF or IHC-P

種交差性 交差種: Mouse, Rat, Human

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 WB: HeLa whole cell lysate treated with Calyculin A or Camptothecin. Dot Blot: RPA32/RPA2

(pT21) phospho peptide.

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.

Stable for 12 months at -20°C.

バッファー pH: 7.20

Preservative: 0.05% Sodium azide

Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue

culture supernatant

精製度 Protein A purified

**ポリ/モノ** モノクローナル **クローン名** EPR2846(2)

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ab109394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
Dot blot		1/1000.
WB		1/50000 - 1/200000. Detects a band of approximately 32 kDa (predicted molecular weight: 29 kDa).  The antibody has been tested with milk (5%) and BSA (2%) as blocking reagents, but it provided better results with 5%milk.
ELISA		Use at an assay dependent concentration.

追加情報

Is unsuitable for Flow Cyt,ICC/IF or IHC-P.

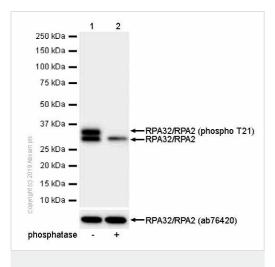
#### ターゲット情報

機能	Required for DNA recombination, repair and replication. The activity of RP-A is mediated by single-stranded DNA binding and protein interactions.  Functions as component of the alternative replication protein A complex (aRPA). aRPA binds single-stranded DNA and probably plays a role in DNA repair; it does not support chromosomal DNA replication and cell cycle progression through S-phase. In vitro, aRPA cannot promote efficient priming by DNA polymerase alpha but supports DNA polymerase delta synthesis in the presence of PCNA and replication factor C (RFC), the dual incision/excision reaction of
翻訳後修飾	nucleotide excision repair and RAD51-dependent strand exchange.  Phosphorylated in a cell-cycle-dependent manner (from the S phase until mitosis).
N77 はく とく 199 July	Phosphorylated by ATR upon DNA damage, which promotes its translocation to nuclear foci. Can be phosphorylated in vitro by PRKDC/DNA-PK in the presence of Ku and DNA, and by CDK1.

**細胞内局在**Nucleus. Nucleus > PML body. Also present in PML nuclear bodies. Redistributes to discrete nuclear foci upon DNA damage.

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#### 画像



Western blot - Anti-RPA32/RPA2 (phospho T21) antibody [EPR2846(2)] (ab109394)

**All lanes**: Anti-RPA32/RPA2 (phospho T21) antibody [EPR2846(2)] (ab109394) at 1/5000 dilution

**Lane 1 :** MDA-MB-231 (Human breast adenocarcinoma epithelial cell) whole cell lysates

**Lane 2**: MDA-MB-231 (Human breast adenocarcinoma epithelial cell) whole cell lysates. Then the membrane was incubated with phosphatase.

Lysates/proteins at 15 µg per lane.

#### Secondary

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

**Predicted band size:** 29 kDa **Observed band size:** 32,36 kDa

Exposure time: 30 seconds

Blocking/Diluting buffer and concentration: 5% NFDM/TBST

Direct ELISA antibody dose-response curve

P1: RPA92/RPA2 (phospho T21) 10ngtri

NP: non-phospho 10ngtri

NP: non-phospho 1ngtri

NP: non-phospho 1ngtri

NP: non-phospho 1ngtri

NP: non-phospho 1ngtri

Concentration of Antibody (ng mil)

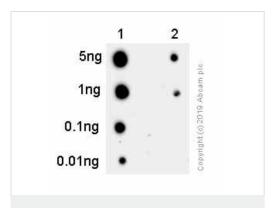
ELISA - Anti-RPA32/RPA2 (phospho T21) antibody [EPR2846(2)] (ab109394)

Direct ELISA antigen dose-response curve using purified ab109394.

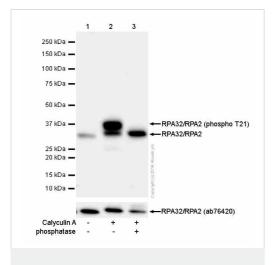
Primary antibody: ab109394 (0-1000nweg/ml).

Antigens: P1: Human RPA32/RPA2 (phospho T21) at 10ng/ml and 1ng/ml; NP: non-phospho at 10ng/ml and 1 ng/ml.

Secondary antibody: Alkaline Phosphatase-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at 1/2500 dilution.



Dot Blot - Anti-RPA32/RPA2 (phospho T21) antibody [EPR2846(2)] (ab109394)



Western blot - Anti-RPA32/RPA2 (phospho T21) antibody [EPR2846(2)] (ab109394)

Dot blot analysis of human c-Myb RPA32/RPA2 (pT21) phospho peptide (Lane 1) and RPA32/RPA2 non-phospho peptide (Lane 2) labeling RPA32/RPA2 (phospho T21) with purified ab109394 at a dilution of 1/5000. **ab97051** (Peroxidase conjugated goat antirabbit lgG (H+L)) was used as the secondary antibody at a dilution of 1/2500.

Blocking and dilution buffer: 5% NFDM/TBST.

Exposure time: 3 minutes.

**All lanes :** Anti-RPA32/RPA2 (phospho T21) antibody [EPR2846(2)] (ab109394) at 1/2000 dilution

Lane 1: C6 (Rat glial tumor glial cell) whole cell lysates

Lane 2 : C6 (Rat glial tumor glial cell) treated with 100nM calyculin A for 60 minutes whole cell lysates

**Lane 3**: C6 (Rat glial tumor glial cell) treated with 100nM calyculin A for 60 minutes whole cell lysates. Then the membrane was incubated with phosphatase.

Lysates/proteins at 15 µg per lane.

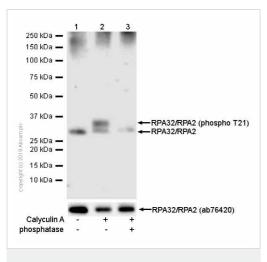
#### Secondary

**All lanes :** Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

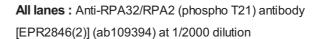
Predicted band size: 29 kDa Observed band size: 32,36 kDa

Blocking/Diluting buffer and concentration:5% NFDM/TBST.

Exposure time: 110 seconds.



Western blot - Anti-RPA32/RPA2 (phospho T21) antibody [EPR2846(2)] (ab109394)



Lane 1: NIH/3T3 (Mouse embryonic fibroblast) whole cell lysates

Lane 2: NIH/3T3 (Mouse embryonic fibroblast) treated with

100ng/ml calyculin A for 30 minutes whole cell lysates

Lane 3: NIH/3T3 (Mouse embryonic fibroblast) treated with 100ng/ml calyculin A for 60 3minutes whole cell lysates. Then the membrane was incubated with phosphatase

Lysates/proteins at 15 µg per lane.

#### **Secondary**

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

**Predicted band size:** 29 kDa **Observed band size:** 32,36 kDa

Blocking/Diluting buffer and concentration: 5% NFDM/TBST.

Exposure time: 180 seconds.

Western blot - Anti-RPA32/RPA2 (phospho T21) antibody [EPR2846(2)] (ab109394)

**All lanes :** Anti-RPA32/RPA2 (phospho T21) antibody [EPR2846(2)] (ab109394) at 1/50000 dilution

Lane 1: HeLa whole cell lysate - untreated

Lane 2: HeLa whole cell lysate - treated with Calyculin A

Lane 3: HeLa whole cell lysate - treated with Calyculin A and

Alkaline Phosphatase

Lysates/proteins at 10 µg per lane.

#### Secondary

**All lanes :** Peroxidase-conjugated goat anti-rabbit lgG (H+L) at 1/1000 dilution

**Predicted band size:** 29 kDa **Observed band size:** 32 kDa

#### Exposure time: 30 seconds

Blocking and dilution buffer: 5% NFDM/TBST.

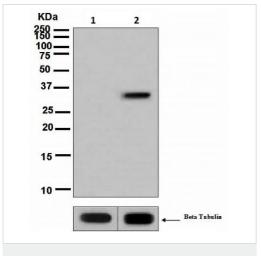
1 2
5ng
1ng
0.1ng
0.01ng

Dot Blot - Anti-RPA32/RPA2 (phospho T21) antibody [EPR2846(2)] (ab109394)

Dot blot analysis of RPA32/RPA2 (pT21) phospho peptide (lane 1) and RPA32/RPA2 non-phospho peptide (lane 2) labelling RPA32/RPA2 (phospho T21) with ab109394 at a dilution of 1/1000. A peroxidase-conjugated goat anti-rabbit lgG (H+L) was used as the secondary antibody (1/2500).

Blocking and dilution buffer: 5% NFDM/TBST.

Exposure time: 3 minutes.



Western blot - Anti-RPA32/RPA2 (phospho T21) antibody [EPR2846(2)] (ab109394)

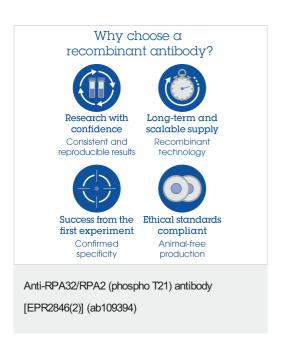
**All lanes :** Anti-RPA32/RPA2 (phospho T21) antibody [EPR2846(2)] (ab109394) at 1/50000 dilution

Lane 1: HeLa cell lysates, untreated

Lane 2: HeLa cell lysates, treated with Camptothecin

Lysates/proteins at 10 µg per lane.

**Predicted band size:** 29 kDa **Observed band size:** 32 kDa



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