abcam

Product datasheet

Anti-Vitamin D Receptor antibody [EPR4552] - ChIP Grade ab109234





RabMAb

27 References 8 图像

概述

产品名称 Anti-Vitamin D Receptor抗体[EPR4552] - ChIP Grade

描述 兔单克隆抗体[EPR4552] to Vitamin D Receptor - ChIP Grade

宿主 Rabbit

经测试应用 适用于: WB, IP, ChIP

不适用于: Flow Cyt,ICC/IF or IHC-P

种属反应性 与反应: Mouse, Rat, Human

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

阳性对照 WB: HeLa, U-937, T-47D and SKBR-3 cell lysates; Rat and mouse kidney tissue lysates. ChIP:

Chromatin prepared from T-47D cells.

常规说明 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**.

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.

Stable for 12 months at -20°C.

存储溶液 pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 40% Glycerol, 59% PBS, 0.05% BSA

纯**度** Protein A purified

克隆 单克隆

1

克隆编号 EPR4552

同种型 IgG

应用

The Abpromise guarantee Abpromise™承诺保证使用ab109234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		1/1000. Detects a band of approximately 48 kDa (predicted molecular weight: 48 kDa). For unpurified use at 1/1000 - 1/10000.
IP		1/30.
ChIP		Use 5 µg for 25 µg of chromatin.

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

靶标

Nuclear hormone receptor. Transcription factor that mediates the action of vitamin D3 by controlling the expression of hormone sensitive genes. Regulates transcription of hormone sensitive genes via its association with the WINAC complex, a chromatin-remodeling complex. Recruited to promoters via its interaction with the WINAC complex subunit BAZ1B/WSTF, which mediates the interaction with acetylated histones, an essential step for VDR-promoter association. Plays a central role in calcium homeostasis.

疾病相关 Defects in VDR are the cause of rickets vitamin D-dependent type 2A (VDDR2A) [MIM:277440].

A disorder of vitamin D metabolism resulting in severe rickets, hypocalcemia and secondary

hyperparathyroidism. Most patients have total alopecia in addition to rickets.

序列相似性 Belongs to the nuclear hormone receptor family. NR1 subfamily.

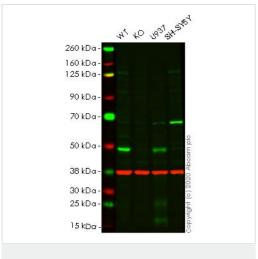
Contains 1 nuclear receptor DNA-binding domain.

结构域 Composed of three domains: a modulating N-terminal domain, a DNA-binding domain and a C-

terminal ligand-binding domain.

细胞定位 Nucleus.

图片



Western blot - Anti-Vitamin D Receptor antibody [EPR4552] - ChIP Grade (ab109234)

All lanes : Anti-Vitamin D Receptor antibody [EPR4552] - ChIP Grade (ab109234) at 1/1000 dilution

Lane 1: Wild-type HeLa lysate

Lane 2: Vitamin D Receptor knockout HeLa lysate

Lane 3: U-937 lysate

Lane 4: SH-SY5Y lysate

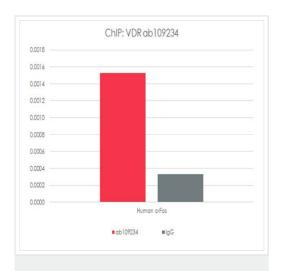
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 48 kDa

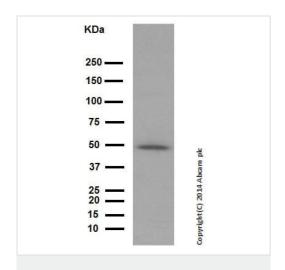
Lanes 1-4: Merged signal (red and green). Green - ab109234 observed at 50 kDa. Red - loading control **ab8245** observed at 37 kDa.

ab109234 Anti-Vitamin D Receptor antibody [EPR4552] - ChIP Grade was shown to specifically react with Vitamin D Receptor in wild-type HeLa cells. Loss of signal was observed when knockout cell line ab265430 (knockout cell lysate ab257796) was used. Wild-type and Vitamin D Receptor knockout samples were subjected to SDS-PAGE. ab109234 and Anti-GAPDH antibody [6C5] - Loading Control (ab8245) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit lgG H&L (IRDye® 800CW) preadsorbed (ab216773) and Goat anti-Mouse lgG H&L (IRDye® 680RD) preadsorbed (ab216776) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



ChIP - Anti-Vitamin D Receptor antibody [EPR4552] - ChIP Grade (ab109234)

Chromatin was prepared from T-47D cells according to the Abcam X-ChIP protocol. Cells were fixed with 1% formaldehyde for 10 minutes. The ChIP was performed with 25 μg of chromatin, 5 μg of ab109234 (red), and 20 μL of protein A/G sepharose beads slurry (10 μL of sepharose A beads + 10 μL of sepharose G beads). 5 μg of rabbit normal lgG was added to the beads as a control sample (grey). The immunoprecipitated DNA was quantified by real time PCR (SYBR Green chemistry) with primers to c-Fos.



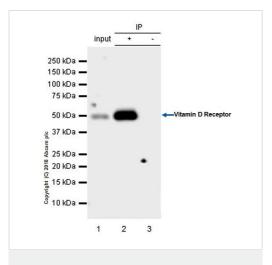
Western blot - Anti-Vitamin D Receptor antibody [EPR4552] - ChIP Grade (ab109234) Anti-Vitamin D Receptor antibody [EPR4552] - ChIP Grade (ab109234) at 1/5000 dilution (purified) + HeLa cell lysate at 20 µg

Secondary

Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 48 kDa **Observed band size:** 48 kDa

Blocking and diluting buffer: 5% NFDM/TBST.



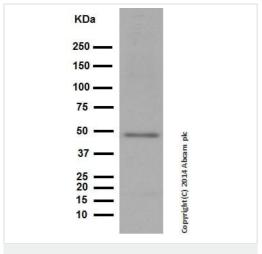
Immunoprecipitation - Anti-Vitamin D Receptor antibody [EPR4552] - ChIP Grade (ab109234)

Lane 1 (input): T-47D (Human ductal breast epithelial tumor epithelial cell) whole cell lysate, 10 µg

Lane 2(+): T-47D whole cell lysate

Lane 3 (-): Rabbit monoclonal IgG (<u>ab172730</u>) instead of ab109234 in T-47D whole cell lysate

Ab109234 immunoprecipitating Vitamin D receptor in T-47D whole cell lysates. Capture antibody was used at a 1/30 dilution (2 μg in 0.35 mg lysates). For western blotting, primary antibody was used as ab109234 at 1/1000 dilution (0.62 μg/mL). VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/5000 dilution.



Western blot - Anti-Vitamin D Receptor antibody [EPR4552] - ChIP Grade (ab109234)

Anti-Vitamin D Receptor antibody [EPR4552] - ChIP Grade (ab109234) at 1/5000 dilution (purified) + Mouse kidney tissue lysate at 20 μg

Secondary

Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 48 kDa **Observed band size:** 48 kDa

Blocking and diluting buffer: 5% NFDM/TBST.

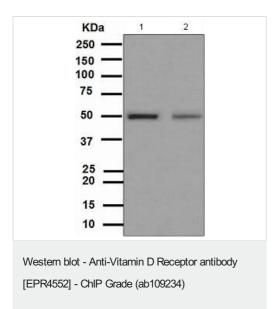
Western blot - Anti-Vitamin D Receptor antibody [EPR4552] - ChIP Grade (ab109234) Anti-Vitamin D Receptor antibody [EPR4552] - ChIP Grade (ab109234) at 1/1000 dilution (purified) + Rat kidney tissue lysate at 10 μ g

Secondary

Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 48 kDa **Observed band size:** 48 kDa

Blocking and diluting buffer: 5% NFDM/TBST.



All lanes : Anti-Vitamin D Receptor antibody [EPR4552] - ChIP Grade (ab109234) at 1/1000 dilution (unpurified)

Lane 1 : T47D cell lysate

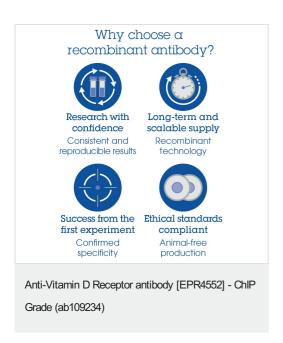
Lane 2 : SKBR-3 cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes: HRP-conjugated goat anti-rabbit lgG at 1/2000 dilution

Predicted band size: 48 kDa **Observed band size:** 48 kDa



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