abcam

Product datasheet

# Anti-Mineralocorticoid Receptor antibody ab64457

1 Abreviews 20 References 4 图像

## 概述

| | |
|---|---|
| **产品名称** | Anti-Mineralocorticoid Receptor抗体 |
| **描述** | 兔多克隆抗体to Mineralocorticoid Receptor |
| **宿主** | Rabbit |
| **特异性** | Replenishment batches of ab64457 are tested in WB. Previous batches were additionally validated in ICC/IF and IHC-P. These applications are still expected to work and are covered by our Abpromise guarantee. |
| **经测试应用** | **适用于:** WB, IHC-P, ICC/IF |
| **种属反应性** | **与反应:** Mouse, Human<br>**预测可用于:** Rat, Xenopus laevis, Non human primates |
| **免疫原** | Synthetic peptide conjugated to KLH derived from within residues 950 to the C-terminus of Human Mineralocorticoid Receptor.参阅Abcam的专有抗源政策(Peptide available as **ab74464**.) |
| **阳性对照** | This antibody gave a positive signal in the following lysates: Mouse Kidney Tissue Human Small Intestine Tissue Human Colon Tissue ICC/IF: HeLa cells. |
| **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.<br>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 or -80°C. Avoid freeze / thaw cycle. |
| **存储溶液** | pH: 7.40<br>Preservative: 0.02% Sodium azide<br>Constituent: PBS<br><br>Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising |

agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.

| | |
|---|---|
| **纯度** | Immunogen affinity purified |
| **克隆** | **多克隆** |
| **同种型** | IgG |

## 应用

**The Abpromise guarantee** **Abpromise™承诺保证使用ab64457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。

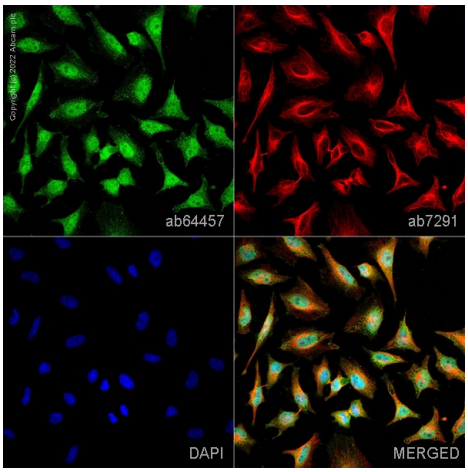
| 应用 | Ab评论 | 说明 |
|---|---|---|
| **WB** | | Use a concentration of 1 µg/ml. Detects a band of approximately 100 kDa (predicted molecular weight: 107 kDa). |
| **IHC-P** | | Use a concentration of 1 µg/ml. |
| **ICC/IF** | ★★★☆☆ (1) | Use a concentration of 1 µg/ml. |

## 靶标

| | |
|---|---|
| **功能** | Receptor for both mineralocorticoids (MC) such as aldosterone and glucocorticoids (GC) such as corticosterone or cortisol. Binds to mineralocorticoid response elements (MRE) and transactivates target genes. The effect of MC is to increase ion and water transport and thus raise extracellular fluid volume and blood pressure and lower potassium levels. |
| **组织特异性** | Ubiquitous. Highly expressed in distal tubules, convoluted tubules and cortical collecting duct in kidney, and in sweat glands. Detected at lower levels in cardiomyocytes, in epidermis and in colon enterocytes. |
| **疾病相关** | Defects in NR3C2 are a cause of autosomal dominant pseudohypoaldosteronism type I (AD-PHA1) [MIM:177735]. PHA1 is characterized by urinary salt wasting, resulting from target organ unresponsiveness to mineralocorticoids. There are 2 forms of PHA1: the autosomal dominant form that is mild, and the recessive form which is more severe and due to defects in any of the epithelial sodium channel subunits. In AD-PHA1 the target organ defect is confined to kidney. Clinical expression can vary from asymptomatic to moderate. It may be severe at birth, but symptoms remit with age. Familial and sporadic cases have been reported.<br>Defects in NR3C2 are a cause of early-onset hypertension with severe exacerbation in pregnancy (EOHSEP) [MIM:605115]. Inheritance is autosomal dominant. The disease is characterized by the onset of severe hypertension before the age of 20, and by suppression of aldosterone secretion. |
| **序列相似性** | Belongs to the nuclear hormone receptor family. NR3 subfamily.<br>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. |
| **翻译后修饰** | Phosphorylated. |
| **细胞定位** | Cytoplasm. Nucleus. Endoplasmic reticulum membrane. Cytoplasmic and nuclear in the absence of ligand; nuclear after ligand-binding. When bound to HSD11B2, it is found associated with the |

endoplasmic reticulum membrane.

## 图片

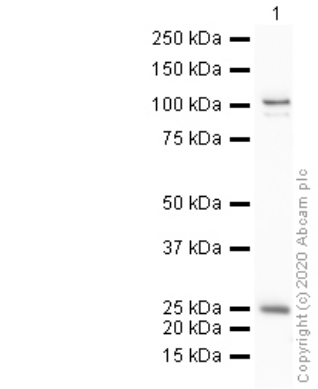



Immunocytochemistry/ Immunofluorescence - Anti-Mineralocorticoid Receptor antibody (ab64457)

ab64457 staining Mineralocorticoid Receptor in HeLa cells. The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.1% PBS-Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1%PBS-Tween for 1h. The cells were then incubated overnight at 4°C with ab64457 at 1µg/ml and **ab7291**, Mouse monoclonal [DM1A] to alpha Tubulin - Loading Control. Cells were then incubated with **ab150081**, Goat polyclonal Secondary Antibody to Rabbit IgG - H&L (Alexa Fluor® 488), pre-adsorbed at 1/1000 dilution (shown in green) and **ab150120**, Goat polyclonal Secondary Antibody to Mouse IgG - H&L (Alexa Fluor® 594), pre-adsorbed at 1/1000 dilution (shown in pseudocolour red). Nuclear DNA was labelled with DAPI (shown in blue).

Also suitable in cells fixed with 100% methanol (5 min).

Image was acquired with a high-content analyser (Operetta CLS, Perkin Elmer) and a maximum intensity projection of confocal sections is shown.




Western blot - Anti-Mineralocorticoid Receptor antibody (ab64457)

Anti-Mineralocorticoid Receptor antibody (ab64457) at 1 µg/ml + Human small intestine tissue lysate - total protein at 10 µg

**Secondary**

Goat polyclonal to Rabbit IgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

Developed using the ECL technique.

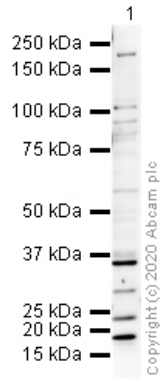
Performed under reducing conditions.

**Predicted band size:** 107 kDa
**Observed band size:** 102 kDa

**Exposure time:** 1 minute

This blot was produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes.

The membrane was then blocked for an hour using 2% Bovine Serum Albumin before being incubated with ab64457 overnight at 4°C. Antibody binding was detected using an anti-rabbit antibody conjugated to HRP, and visualised using ECL development solution **ab133406**.




Western blot - Anti-Mineralocorticoid Receptor antibody (ab64457)

Anti-Mineralocorticoid Receptor antibody (ab64457) at 1 µg/ml + Kidney (Mouse) Tissue Lysate at 10 µg

**Secondary**
Goat polyclonal to Rabbit IgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

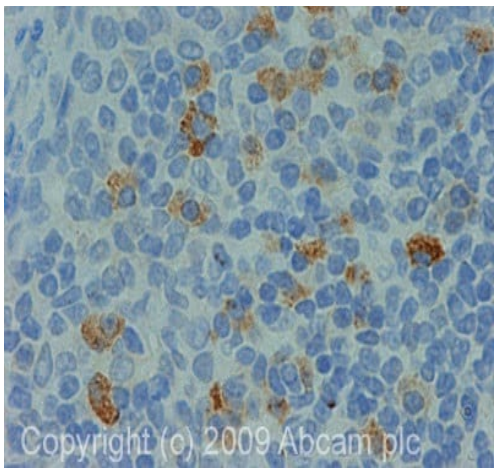
Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 107 kDa
**Observed band size:** 102 kDa
**Additional bands at:** 200 kDa (possible non-specific binding), 87 kDa (possible non-specific binding), 95 kDa (possible non-specific binding)

**Exposure time:** 12 minutes

This blot was produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 2% Bovine Serum Albumin before being incubated with ab64457 overnight at 4°C. Antibody binding was detected using an anti-rabbit antibody conjugated to HRP, and visualised using ECL development solution **ab133406**.




Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Mineralocorticoid Receptor antibody (ab64457)

IHC image of Mineralocorticoid Receptor staining in Human Tonsil FFPE section, performed on a BondTM system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab64457, 1µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX



## Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit **https://www.abcam.cn/abpromise** or contact our technical team.

## Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors