

### Anti-EBP50/NHERF-1 antibody [EPR5562] ab109430

KO 評価済 リコンビナント RabMAb

2 References 画像数 6

#### 製品の概要

製品名	Anti-EBP50/NHERF-1 antibody [EPR5562]
製品の詳細	Rabbit monoclonal [EPR5562] to EBP50/NHERF-1
由来種	Rabbit
アプリケーション	<b>適用あり:</b> WB, IHC-P <b>適用なし:</b> Flow Cyt, ICC/IF or IP
種交差性	<b>交差種:</b> 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	HCT116, HepG2, 293T, Jurkat, C6, PC-12 and MCF-7 cell lysates; Human kidney tissue
特記事項	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p> <p>Mouse: We have preliminary internal testing data to indicate this antibody may not react with this species. Please contact us for more information.</p>

#### 製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
バッファー	<p>pH: 7.20</p> <p>Preservative: 0.05% Sodium azide</p> <p>Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant</p>
精製度	Protein A purified
ポリ/モノ	モノクローナル

クローン名                      EPR5562  
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ab109430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		1/1000 - 1/10000. Predicted molecular weight: 39 kDa.
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. Antigen retrieval is recommended.

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

#### ターゲット情報

**機能**    Scaffold protein that connects plasma membrane proteins with members of the ezrin/moesin/radixin family and thereby helps to link them to the actin cytoskeleton and to regulate their surface expression. Necessary for recycling of internalized ADRB2. Was first known to play a role in the regulation of the activity and subcellular location of SLC9A3. Necessary for cAMP-mediated phosphorylation and inhibition of SLC9A3. May enhance Wnt signaling. May participate in HTR4 targeting to microvilli (By similarity). Interacts with MCC.

**組織特異性**                                      Detected in liver, kidney, pancreas, prostate, spleen, small intestine and placenta, in particular in the syncytiotrophoblast.

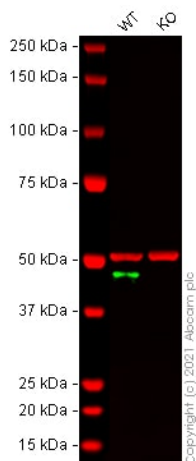
**関連疾患**    Defects in SLC9A3R1 are the cause of hypophosphatemic nephrolithiasis/osteoporosis type 2 (NPHLOP2) [MIM:612287]. Hypophosphatemia results from idiopathic renal phosphate loss. It contributes to the pathogenesis of hypophosphatemic urolithiasis (formation of urinary calculi) as well to that of hypophosphatemic osteoporosis (bone demineralization).

**配列類似性**    Contains 2 PDZ (DHR) domains.

**翻訳後修飾**    Phosphorylated on serine residues.

**細胞内局在**    Cytoplasm. Apical cell membrane. Endomembrane system. Cell projection > filopodium. Cell projection > ruffle. Cell projection > microvillus. Translocates from the cytoplasm to the apical cell membrane in a PODXL-dependent manner (By similarity). Colocalizes with actin in microvilli-rich apical regions of the syncytiotrophoblast. Found in microvilli, ruffling membrane and filopodia of HeLa cells. Present in lipid rafts of T-cells.

#### 画像



Western blot - Anti-EBP50/NHERF-1 antibody  
[EPR5562] (ab109430)

**All lanes :** Anti-EBP50/NHERF-1 antibody [EPR5562] (ab109430)  
at 1/1000 dilution

**Lane 1 :** Wild-type HeLa cell lysate

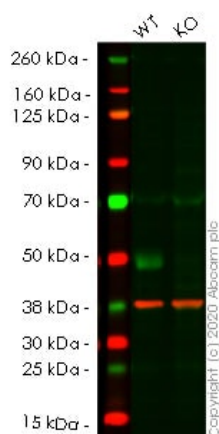
**Lane 2 :** SLC9A3R1 knockout HeLa cell lysate

Performed under reducing conditions.

**Predicted band size:** 39 kDa

**Observed band size:** 46 kDa

False colour image of Western blot: Anti-EBP50/NHERF-1 antibody [EPR5562] staining at 1/1000 dilution, shown in green; Mouse anti-Alpha Tubulin [DM1A] ([ab7291](#)) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab109430 was shown to bind specifically to EBP50/NHERF-1. A band was observed at 46 kDa in wild-type HeLa cell lysates with no signal observed at this size in SLC9A3R1 knockout cell line [ab264914](#) (knockout cell lysate [ab257280](#)). To generate this image, wild-type and SLC9A3R1 knockout HeLa cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in fluorescent western blot (TBS-based) blocking solution before incubation with primary antibodies overnight at 4°C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed ([ab216776](#)) at 1/20000 dilution.



Western blot - Anti-EBP50/NHERF-1 antibody  
[EPR5562] (ab109430)

**All lanes :** Anti-EBP50/NHERF-1 antibody [EPR5562] (ab109430)  
at 1/1000 dilution

**Lane 1 :** Wild-type HCT116 cell lysate

**Lane 2 :** SLC9A3R1 knockout HCT116 cell lysate

Lysates/proteins at 20 µg per lane.

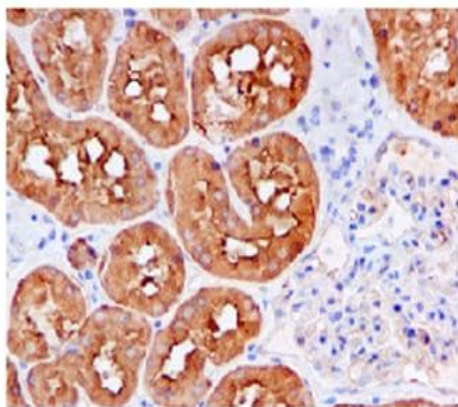
Performed under reducing conditions.

**Predicted band size:** 39 kDa

**Observed band size:** 48 kDa

**Lanes 1- 2:** Merged signal (red and green). Green - ab109430 observed at 48 kDa. Red - Anti-GAPDH antibody [6C5] - Loading Control ([ab8245](#)) observed at 37 kDa.

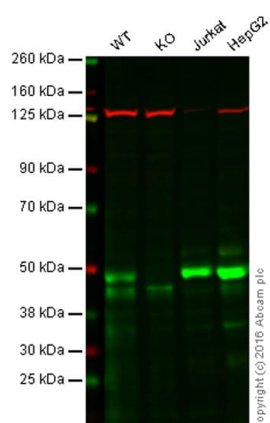
ab109430 was shown to react with EBP50/NHERF-1 in wild-type HCT116 cells in western blot. Loss of signal was observed when knockout cell line [ab266876](#) (knockout cell lysate [ab257281](#)) was used. Wild-type HCT116 and SLC9A3R1 knockout HCT116 cell lysates were subjected to SDS-PAGE. Membrane was blocked for 1 hour at room temperature in 0.1% TBST with 3% non-fat dried milk. ab109430 and Anti-GAPDH antibody [6C5] - Loading Control ([ab8245](#)) overnight at 4°C at a 1 in 1000 dilution and a 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye®800CW) preadsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye®680RD) preadsorbed ([ab216776](#)) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-EBP50/NHERF-1 antibody [EPR5562] (ab109430)

Immunohistochemical analysis of EBP50/NHERF-1 in paraffin-embedded Human kidney tissue using ab109430 at 1/100 dilution.

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



Western blot - Anti-EBP50/NHERF-1 antibody [EPR5562] (ab109430)

**Lane 1:** Wild-type HAP1 cell lysate (20 µg)

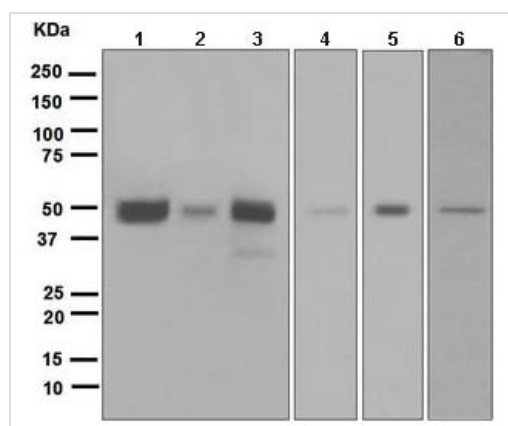
**Lane 2:** EBP50/NHERF-1 knockout HAP1 cell lysate (20 µg)

**Lane 3:** Jurkat cell lysate (20 µg)

**Lane 4:** HepG2 cell lysate (20 µg)

**Lanes 1 - 4:** Merged signal (red and green). Green - ab109430 observed at 48 kDa. Red - loading control, **ab18058**, observed at 124 kDa.

ab109430 was shown to specifically recognize EBP50/NHERF-1 in wild-type HAP1 cells along with additional cross-reactive bands. No band was observed when EBP50/NHERF-1 knockout samples were examined. Wild-type and EBP50 knockout samples were subjected to SDS-PAGE. ab109430 and **ab18058** (loading control to Vinculin) were diluted at 1/500 and 1/10000 respectively and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (**ab216776**) secondary antibodies at 1/10000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-EBP50/NHERF-1 antibody  
[EPR5562] (ab109430)

**All lanes :** Anti-EBP50/NHERF-1 antibody [EPR5562] (ab109430)  
at 1/1000 dilution

**Lane 1 :** HepG2 cell lysate

**Lane 2 :** 293T cell lysate

**Lane 3 :** Jurkat cell lysate

**Lane 4 :** C6 cell lysate

**Lane 5 :** PC12 cell lysate

**Lane 6 :** MCF7 cell lysate

Lysates/proteins at 10 µg per lane.

**Predicted band size:** 39 kDa

Why choose a  
recombinant antibody?



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Consistent and  
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scalable supply**  
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technology



**Success from the  
first experiment**  
Confirmed  
specificity



**Ethical standards  
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Animal-free  
production

Anti-EBP50/NHERF-1 antibody [EPR5562]  
(ab109430)

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