




## Product datasheet

### Anti-EBP50/NHERF-1 antibody ab3452

★★★★★ [8 Abreviews](#) [42 References](#) [7 Images](#)

#### Overview

<b>Product name</b>	Anti-EBP50/NHERF-1 antibody
<b>Description</b>	Rabbit polyclonal to EBP50/NHERF-1
<b>Host species</b>	Rabbit
<b>Specificity</b>	Detects EBP50/NHERF-1 from human T84 and Calu3 cells as well as recombinant human protein.
<b>Tested applications</b>	<b>Suitable for:</b> WB, IP, IHC-Fr, ICC, IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Dog, Human <b>Predicted to work with:</b> Rabbit, Cow, Cynomolgus monkey 
<b>Immunogen</b>	Recombinant fragment (His-tag) corresponding to Human EBP50/NHERF-1. All His-tag specific antibody has been removed. Sequence: RSASSDTSEELNSQDSP <div>  <a href="#">Run BLAST with</a>  <a href="#">Run BLAST with</a> </div>
<b>Positive control</b>	WB: MCF7, T47D, SK-BR-3, HeLa, HepG2; Caco-2. IHC: mouse airway ICC: T47D cells
<b>General notes</b>	<p>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.</p> <p>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&amp;As</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	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.
<b>Storage buffer</b>	Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 99% PBS
<b>Purity</b>	Immunogen affinity purified

Clonality	Polyclonal
Isotype	IgG

## Applications

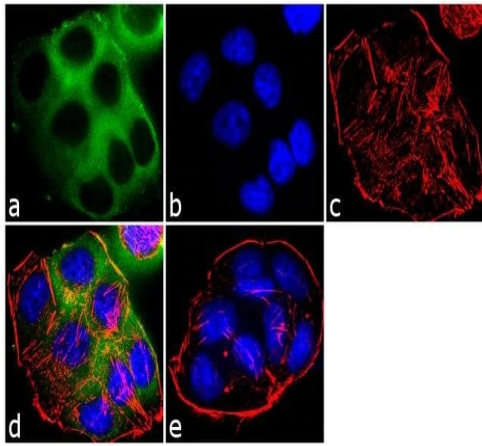
**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab3452 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★★ (4)	Use a concentration of 0.2 - 1 µg/ml. Detects a band of approximately 50 kDa (predicted molecular weight: 50 kDa).
IP		Use at an assay dependent concentration.
IHC-Fr		Use at an assay dependent concentration. PubMed: 15703401
ICC		Use a concentration of 2 µg/ml.
IHC-P		Use a concentration of 10 µg/ml.

## Target

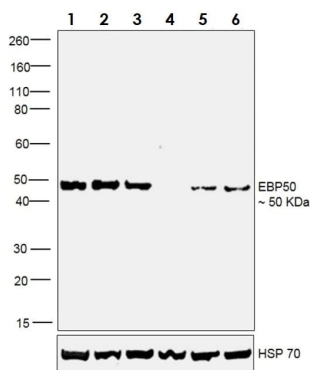
<b>Function</b>	Scaffold protein that connects plasma membrane proteins with members of the ezrin/moesin/radixin family and thereby helps to link them to the actin cytoskeleton and to regulate their surface expression. Necessary for recycling of internalized ADRB2. Was first known to play a role in the 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.
<b>Tissue specificity</b>	Detected in liver, kidney, pancreas, prostate, spleen, small intestine and placenta, in particular in the syncytiotrophoblast.
<b>Involvement in disease</b>	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).
<b>Sequence similarities</b>	Contains 2 PDZ (DHR) domains.
<b>Post-translational modifications</b>	Phosphorylated on serine residues.
<b>Cellular localization</b>	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.

## Images



Immunocytochemistry - Anti-EBP50/NHERF-1 antibody (ab3452)

Immunocytochemistry analysis of 4% paraformaldehyde-fixed 0.1% Triton™ X-100 permeabilized T-47D cells staining EBP50/NHERF-1 with ab3452 at 2µg/ml, and Goat anti-Rabbit IgG (H+L) Superclonal™ Secondary Antibody, Alexa Fluor® 488 conjugate at 1/2000 dilution (green). Nuclear counterstain was SlowFade® Gold Antifade Mountant with DAPI (blue), and F-actin was stained with Alexa Fluor® 555 Rhodamine Phalloidin (red). Negative control used no primary antibody.



Western blot - Anti-EBP50/NHERF-1 antibody (ab3452)

**All lanes :** Anti-EBP50/NHERF-1 antibody (ab3452) at 0.2 µg/ml

**Lane 1 :** Membrane enriched extracts of MCF7 (human breast adenocarcinoma cell line)

**Lane 2 :** Membrane enriched extracts of T-47D (Human ductal breast epithelial tumor cell line)

**Lane 3 :** Membrane enriched extracts of SK-BR-3 (Human mammary gland adenocarcinoma cell line)

**Lane 4 :** Membrane enriched extracts of MDA-MB-231 (human breast adenocarcinoma cell line)

**Lane 5 :** Membrane enriched extracts of HeLa (human epithelial cell line from cervix adenocarcinoma)

**Lane 6 :** Membrane enriched extracts of HepG2 (human liver hepatocellular carcinoma cell line)

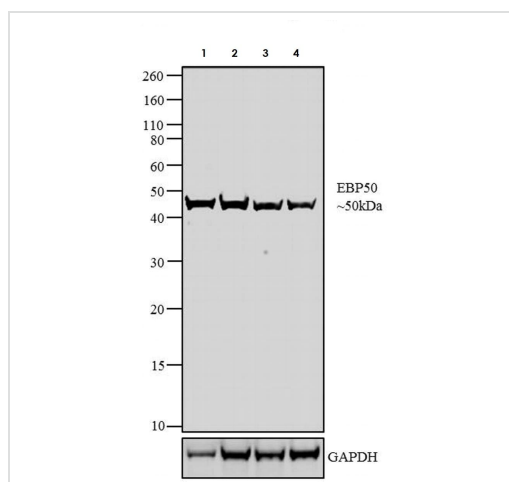
Lysates/proteins at 30 µg per lane.

### Secondary

**All lanes :** Goat anti-Rabbit IgG (H+L) Superclonal™ Recombinant Secondary Antibody, HRP at 1/4000 dilution

Developed using the ECL technique.

**Predicted band size:** 50 kDa



Western blot - Anti-EBP50/NHERF-1 antibody (ab3452)

**All lanes :** Anti-EBP50/NHERF-1 antibody (ab3452) at 1 µg/ml

**Lane 1 :** T-47D (Human ductal breast epithelial tumor cell line) whole cell extract

**Lane 2 :** MCF7 (human breast adenocarcinoma cell line) whole cell extract

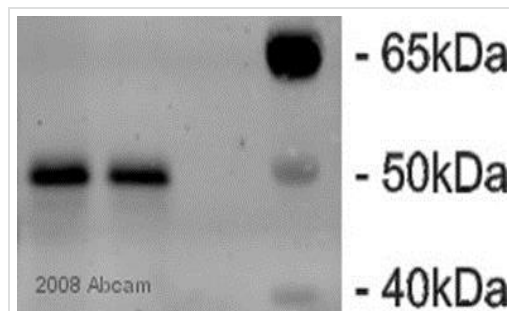
**Lane 3 :** HepG2 (human liver hepatocellular carcinoma cell line) whole cell extract

**Lane 4 :** Caco-2 (Human colorectal adenocarcinoma cell line) whole cell extract

### Secondary

**All lanes :** Goat anti-Rabbit IgG (H+L) Superclonal™ Secondary Antibody, HRP conjugate at 1/2500 dilution

**Predicted band size:** 50 kDa



Western blot - Anti-EBP50/NHERF-1 antibody (ab3452)

This image is courtesy of an anonymous abreview.

**All lanes :** Anti-EBP50/NHERF-1 antibody (ab3452) at 1/1000 dilution

**All lanes :** Whole cell lysate prepared from human HepG2 cells

### Secondary

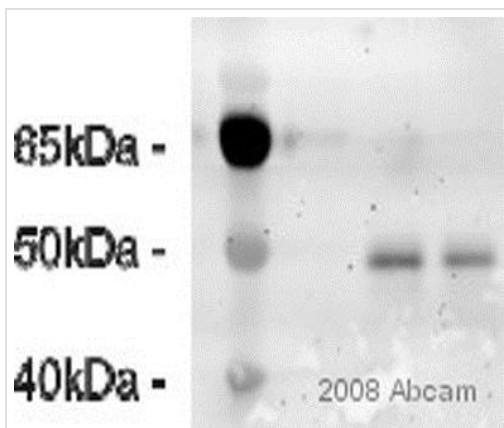
**All lanes :** HRP-conjugated goat polyclonal to rabbit IgG at 1/20000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 50 kDa

**Exposure time:** 40 seconds



Western blot - Anti-EBP50/NHERF-1 antibody  
(ab3452)

This image is courtesy of an anonymous abreview.

**All lanes :** Anti-EBP50/NHERF-1 antibody (ab3452) at 1/1000 dilution

**All lanes :** Whole tissue lysate prepared from mouse liver

**Secondary**

**All lanes :** HRP-conjugated goat polyclonal to rabbit IgG at 1/20000 dilution

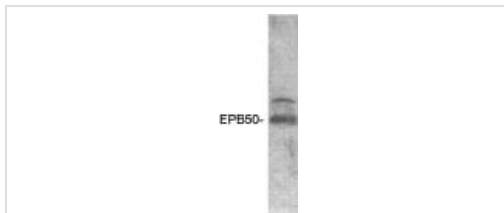
Developed using the ECL technique.

Performed under reducing conditions.

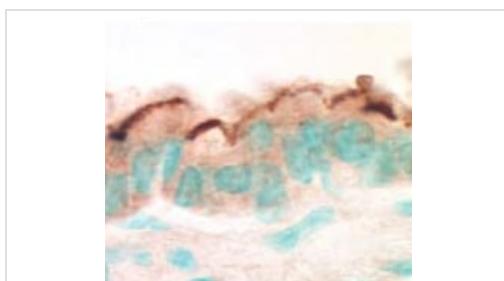
**Predicted band size:** 50 kDa

**Exposure time:** 30 seconds

Western blot detection of recombinant Human EBP50/NHERF-1 using ab3452.



Western blot - Anti-EBP50/NHERF-1 antibody  
(ab3452)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-EBP50/NHERF-1 antibody (ab3452)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse airway tissue sections labeling EBP50/NHERF-1 with ab3452.

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