

### Anti-Nrf2 antibody ab137550

KO 評価済

★★★★☆ 7 Abreviews 335 References 画像数 8

#### 製品の概要

製品名	Anti-Nrf2 antibody
製品の詳細	Rabbit polyclonal to Nrf2
由来種	Rabbit
アプリケーション	適用あり: IP, ChIP, WB, ICC/IF, IHC-P
種交差性	交差種: Human 交差が予測される動物種: Cow 
免疫原	Recombinant fragment corresponding to Human Nrf2 aa 108-413 (internal sequence). Database link: <a href="#">Q16236</a>
ポジティブ・コントロール	WB: MDA-MB-231 nuclear extract treated with 30 μM tBHQ for 4 hours (+). NRF2-transfected (+, including 3xFlag-tag) and HEK-293T whole cell extracts. ICC/IF: HeLa cells. IHC: Human breast carcinoma tissue. ChIP: HepG2 chromatin extract. IP: HepG2 whole cell extracts.
特記事項	<p>NRF2 is bound to ubiquitin when it is the nucleus so MW would be higher than cytoplasm.</p> <p><b>Please note:</b> Nrf2 antibody (ab137550) detects no signal in most untreated samples for WB. Stimuli treated samples are recommended. Nrf2 expression is stimulated by oxidative stress, electrophiles and chemical activators (PMID: 25761198, PMID: 27638861 and PMID: 28587109). WB protocol info included in legend for MDA-MB-231 nuclear extract treated with 30 μM tBHQ for 4 hours (+). Abcam recommended secondaries - Goat Anti-Rabbit HRP (<a href="#">ab205718</a>) and Goat Anti-Rabbit Alexa Fluor®488 (<a href="#">ab150077</a>). Or search our wide range of secondary antibodies for use with your experiment.</p> <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>

#### 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. Avoid freeze / thaw cycle.
バッファー	pH: 7.00 Preservative: 0.025% Proclin 300 Constituents: 78% PBS, 1% BSA, 20% Glycerol (glycerin, glycerine)
精製度	Immunogen affinity purified
ポリモノ	ポリクローナル
アイソタイプ	IgG

## アプリケーション

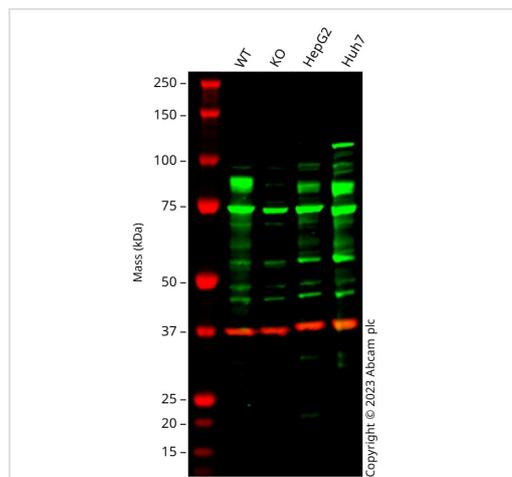
**The Abpromise guarantee**      **Abpromise保証は、次のテスト済みアプリケーションにおけるab137550の使用に適用されます**  
 アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
IP		1/100 - 1/500.
ChIP		Use at an assay dependent concentration. Assay dependent
WB	★★★★★ (6)	1/500 - 1/3000. Detects a band of approximately 110 kDa (predicted molecular weight: 68 kDa). NRF2 is bound to ubiquitin when it is the nucleus so MW would be higher than cytoplasm. Stimuli treated samples are recommended. Expression levels may be better for nuclear fractions or for cell
ICC/IF		1/100 - 1/1000.
IHC-P	★★★★★ (1)	1/100 - 1/1000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

## ターゲット情報

機能	Transcription activator that binds to antioxidant response (ARE) elements in the promoter regions of target genes. Important for the coordinated up-regulation of genes in response to oxidative stress. May be involved in the transcriptional activation of genes of the beta-globin cluster by mediating enhancer activity of hypersensitive site 2 of the beta-globin locus control region.
組織特異性	Widely expressed. Highest expression in adult muscle, kidney, lung, liver and in fetal muscle.
配列類似性	Belongs to the bZIP family. CNC subfamily. Contains 1 bZIP domain.
ドメイン	Acidic activation domain in the N-terminus, and DNA binding domain in the C-terminus.
翻訳後修飾	Phosphorylation of Ser-40 by PKC in response to oxidative stress dissociates NFE2L2 from its cytoplasmic inhibitor KEAP1, promoting its translocation into the nucleus.
細胞内局在	Cytoplasm > cytosol. Nucleus. Cytosolic under unstressed conditions, translocates into the

画像



Western blot - Anti-Nrf2 antibody (ab137550)

**All lanes :** Anti-Nrf2 antibody (ab137550) at 1/1000 dilution

**Lane 1 :** Wild-type A549 cell lysate

**Lane 2 :** NFE2L2 knockout A549 cell lysate

**Lane 3 :** HepG2 cell lysate

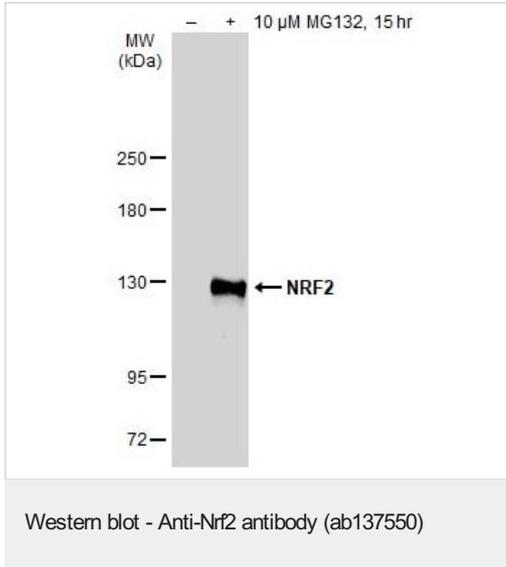
**Lane 4 :** Huh7 cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

**Observed band size:** 85 kDa

Western blot: Anti-NFE2L2 antibody (ab137550) staining at 1/1000 dilution, shown in green; Mouse anti-GAPDH antibody [6C5] ([ab8245](#)) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab137550 was shown to bind specifically to NFE2L2. A band was observed at 85 kDa in wild-type A549 cell lysates with no signal observed at this size in NFE2L2 knockout cell line [ab285359](#) (knockout cell lysate [ab289682](#)). To generate this image, wild-type and NFE2L2 knockout A549 cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween<sup>®</sup> 20 (TBS-T) 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 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution.



**All lanes :** Anti-Nrf2 antibody (ab137550) at 1/500 dilution

**Lane 1 :** Untreated HepG2 whole cell extracts

**Lane 2 :** Treated HepG2 whole cell extracts

Lysates/proteins at 30 μg per lane.

#### Secondary

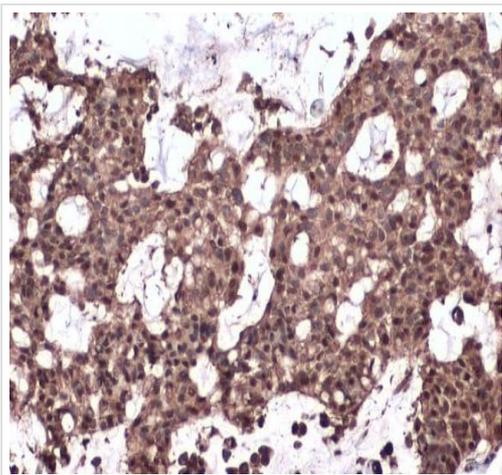
**All lanes :** A HRP-conjugated anti-rabbit IgG antibody

**Observed band size:** 110 kDa

The observed MW (110kDa) is based on PMID: 22703241

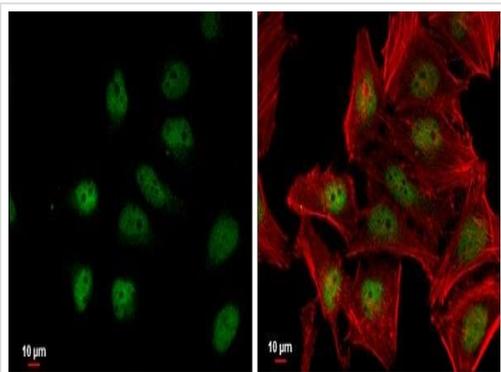
Various whole cell extracts (30 μg) were separated by 7.5% SDS-PAGE

Detection: Trident ECL plus-Enhanced.



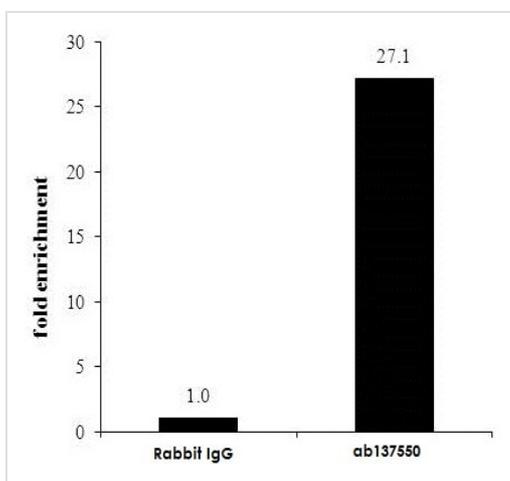
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Nrf2 antibody (ab137550)

Paraffin embedded human breast carcinoma tissue stained for NRF2 using ab137550 at 1/500 dilution in immunohistochemical analysis.



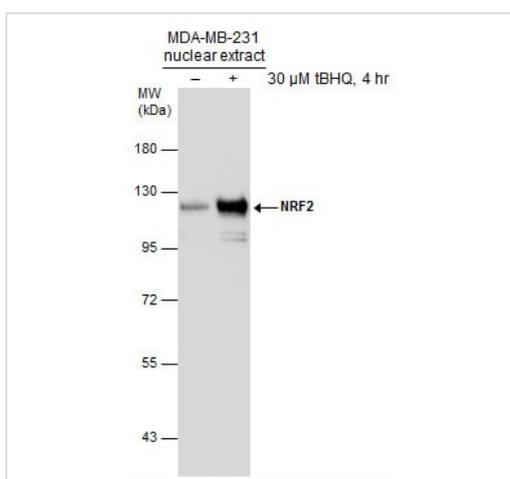
Immunocytochemistry/ Immunofluorescence - Anti-Nrf2 antibody (ab137550)

ab137550 staining Nrf2 in HeLa cells by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with 4% paraformaldehyde. Samples were incubated with primary antibody diluted at 1/500 (green). Phalloidin, a cytoskeleton marker, diluted at 1/100 (red) was used.



ChIP - Anti-Nrf2 antibody (ab137550)

ChIP was performed with HepG2 chromatin extract and 5 µg of either normal rabbit IgG or Anti-Nrf2 antibody (ab137550). The precipitated DNA was detected by PCR with primer set targeting to GCLC gene locus.



Western blot - Anti-Nrf2 antibody (ab137550)

**All lanes** : Anti-Nrf2 antibody (ab137550) at 1/1000 dilution

**Lane 1** : Untreated (-) MDA-MB-231 nuclear extract

**Lane 2** : MDA-MB-231 nuclear extract treated with 30 µM TBHQ for 4 hours (+)

Lysates/proteins at 30 µg per lane.

**Secondary**

**All lanes** : Rabbit IgG antibody (HRP) at 1/10000 dilution

Developed using the ECL technique.

**Observed band size:** 110 kDa

7.5% gel.

Running condition: 80V, 15min; 140V, 40min.

Transfer condition: Semi-dry, 18 V, 60min (Nitrocellulose membrane)

Blocking condition: 5% non-fat milk in TBST, RT, 60min.

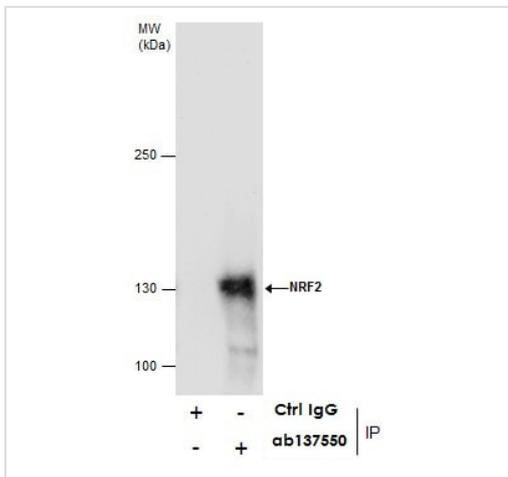
Primary antibody incubation: 4°C overnight.

Secondary antibody incubation: Room temperature for 1 hour.

Washing condition: 5 ml TBST, 4 x 5min.

ECL detection.

The observed MW (110kDa) is based on PMID: 22703241



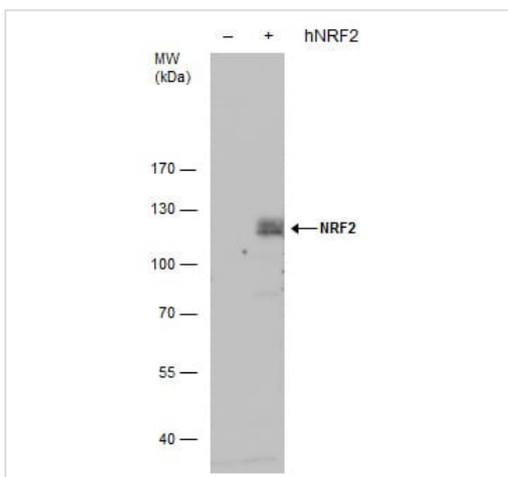
Immunoprecipitation - Anti-Nrf2 antibody (ab137550)

ab137550 at 5 µg immunoprecipitating Nrf2 in HepG2 whole cell extracts.

**Lane 1 (-):** Ctrl IgG instead of ab137550 in HepG2 whole cell extracts.

**Lane 2 (+):** ab137550 + HepG2 whole cell extracts.

For western blotting an anti-Rabbit IgG was used as a secondary reagent.



Western blot - Anti-Nrf2 antibody (ab137550)

**All lanes :** Anti-Nrf2 antibody (ab137550) at 1/1000 dilution

**Lane 1 :** Non-transfected (-) HEK-293T whole cell extracts

**Lane 2 :** NRF2-transfected (+, including 3xFlag-tag) HEK-293T whole cell extracts

Lysates/proteins at 30 µg per lane.

**Secondary**

**All lanes :** HRP-conjugated anti-rabbit IgG antibody

**Observed band size:** 110 kDa

## 5% SDS-PAGE

The observed MW (110kDa) is based on PMID: 22703241

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