# abcam

# Product datasheet

# Anti-NRF1 antibody ab34682

★★★★★ 3 Abreviews 41 References 4 Images

#### Overview

Product name Anti-NRF1 antibody

**Description** Rabbit polyclonal to NRF1

Host species Rabbit

Specificity ab34682 recognises NRF1 (also known as nuclear respiratory factor 1, alpha palindromic binding

protein and alpha-pal).

Tested applications Suitable for: WB, IHC-P, ICC/IF

Species reactivity Reacts with: Human

Predicted to work with: Rat, Chicken, Dog, Chimpanzee, Zebrafish

Immunogen Recombinant full length protein, corresponding to amino acids 1-534 of Mouse NRF1

**General notes**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.

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  $\,$ 

**Properties** 

Form Liquid

Storage instructions 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.

Storage buffer Preservative: 0.01% Sodium azide

Constituents: 0.42% Potassium phosphate, 0.87% Sodium chloride

Purity Protein A purified

**Clonality** Polyclonal

**Isotype** IgG

**Applications** 

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#### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab34682 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	* * * * * * * * * * * * * * * * * * *	1/500 - 1/2000. Detects a band of approximately 67 kDa (predicted molecular weight: 57 kDa). Splice variants exist for this protein that may result in the detection of lower molecular weight bands.
IHC-P		Use a concentration of 2 - 5 μg/ml.
ICC/IF		Use a concentration of 1 µg/ml.

## **Target**

Function Transcription factor that activates the expression of the EIF2S1 (EIF2-alpha) gene. Links the

transcriptional modulation of key metabolic genes to cellular growth and development. Implicated in the control of nuclear genes required for respiration, heme biosynthesis, and mitochondrial

DNA transcription and replication.

**Tissue specificity** Ubiquitously expressed with strongest expression in skeletal muscle.

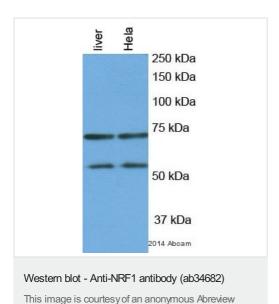
**Sequence similarities** Belongs to the NRF1/Ewg family.

Post-translational modifications

Phosphorylation enhances DNA binding.

Cellular localization Nucleus.

#### **Images**



All lanes: Anti-NRF1 antibody (ab34682) at 1/1000 dilution

Lane 1: Mouse liver whole tissue lysate

Lane 2: HeLa whole cell lysate

Lysates/proteins at 25 µg per lane.

#### Secondary

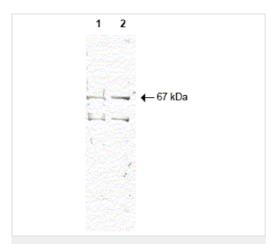
All lanes: HRP-conjugated goat anti-rabbit lgG polyclonal at

1/10000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 57 kDa **Observed band size:** 55,67 kDa



Western blot - Anti-NRF1 antibody (ab34682)

Exposure time: 50 seconds

All lanes: Anti-NRF1 antibody (ab34682) at 1/500 dilution

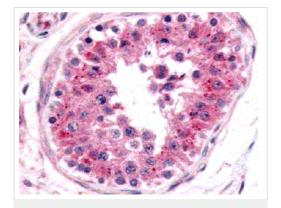
Lane 1 : HeLa Nuclear extract

Lane 2 : HeLa Whole Cell lysate

Secondary

**All lanes :** IRDye $^{\text{TM}}$ 700 labelled goat-a-rabbit lgG at 1/2500 dilution

**Predicted band size:** 57 kDa **Observed band size:** 67 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-NRF1 antibody (ab34682)

Purified anti-NRF1 antibody (ab34682) was used at  $5\mu g/ml$  to detect NRF1 in human testis. Nuclear staining in lymphocytes can be observed.



Immunocytochemistry/ Immunofluorescence - Anti-NRF1 antibody (ab34682)

ICC/IF image of ab34682 stained HeLa cells. The cells were 4% PFA fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab34682, 1µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit lgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

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