

Anti-Nrf2 Antibody [JE30-14]

HA721432



Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse
Applications:	WB, IF-Cell
Molecular Wt:	Predicted band size: 68 kDa
Clone number:	JE30-14

Description: Nuclear factor erythroid 2-related factor 2 (NRF2), also known as nuclear factor erythroid-derived 2-like 2, is a transcription factor that in humans is encoded by the NFE2L2 gene. NRF2 is a basic leucine zipper (bZIP) protein that may regulate the expression of antioxidant proteins that protect against oxidative damage triggered by injury and inflammation, according to preliminary research.[6] In vitro, NRF2 binds to antioxidant response elements (AREs) in the promoter regions of genes encoding cytoprotective proteins. NRF2 induces the expression of heme oxygenase 1 in vitro leading to an increase in phase II enzymes. NRF2 also inhibits the NLRP3 inflammasome. NRF2 appears to participate in a complex regulatory network and performs a pleiotropic role in the regulation of metabolism, inflammation, autophagy, proteostasis, mitochondrial physiology, and immune responses.

Immunogen: Synthetic peptide within Human Nrf2 aa 550-605.

Positive control: HeLa whole cell lysate, HeLa treated with 2μM MG-132 for 18 hours whole cell lysate, HCT 116 whole cell lysate, HCT 116 treated with 25μM MG-132 for 4 hours whole cell lysate, NIH/3T3 treated with 10μM MG-132 for 8 hours cell lysate, HCT 116.

Subcellular location: Cytoplasm, Nucleus.

Database links: SwissProt: Q16236 Human | Q60795 Mouse

Recommended Dilutions:

WB	1:1,000
IF-Cell	1:100

Storage Buffer: 1*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4°C. Store at +4°C short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20°C long term.

Purity: Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

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Applications:WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Cell=Immunofluorescence (Cell) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation

Images

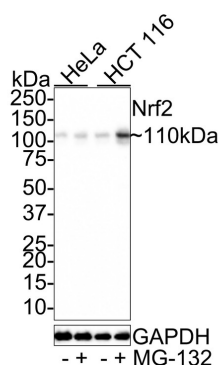


Fig1: Western blot analysis of Nrf2 on different lysates with Rabbit anti-Nrf2 antibody (HA721432) at 1/1,000 dilution.

Lane 1: HeLa whole cell lysate

Lane 2: HeLa treated with 2 μ M MG-132 for 18 hours whole cell lysate

Lane 3: HCT 116 whole cell lysate

Lane 4: HCT 116 treated with 25 μ M MG-132 for 4 hours whole cell lysate

Lysates/proteins at 20 μ g/Lane.

Predicted band size: 68 kDa

Observed band size: 110 kDa

Exposure time: 3 minutes;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA721432) at 1/1,000 dilution was used in 5% NFDM/TBST at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:100,000 dilution was used for 1 hour at room temperature.

Fig2: Western blot analysis of Nrf2 on different lysates with Rabbit anti-Nrf2 antibody (HA721432) at 1/1,000 dilution.

Lane 1: NIH/3T3 cell lysate

Lane 2: NIH/3T3 treated with 10 μ M MG-132 for 8 hours cell lysate

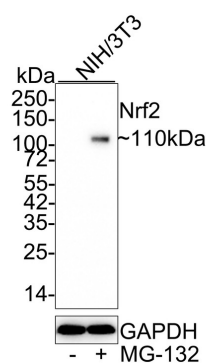
Lysates/proteins at 20 μ g/Lane.

Predicted band size: 68 kDa

Observed band size: 110 kDa

Exposure time: 3 minutes;

4-20% SDS-PAGE gel.



Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA721432) at 1/1,000 dilution was used in 5% NFDM/TBST at 4 $^{\circ}$ C overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

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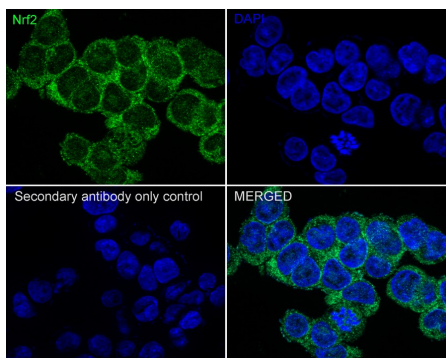


Fig3: Immunocytochemistry analysis of HCT 116 cells labeling Nrf2 with Rabbit anti-Nrf2 antibody (HA721432) at 1/100 dilution.

Cells were fixed in 4% paraformaldehyde for 20 minutes at room temperature, permeabilized with 0.1% Triton X-100 in PBS for 5 minutes at room temperature, then blocked with 1% BSA in 10% negative goat serum for 1 hour at room temperature. Cells were then incubated with Rabbit anti-Nrf2 antibody (HA721432) at 1/100 dilution in 1% BSA in PBST overnight at 4 °C. Goat Anti-Rabbit IgG H&L (iFluor™ 488, HA1121) was used as the secondary antibody at 1/1,000 dilution. PBS instead of the primary antibody was used as the secondary antibody only control. Nuclear DNA was labelled in blue with DAPI.

Note: All products are “FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE”.

Background References

1. Masuda Y et al. The effect of Nrf2 pathway activation on human pancreatic islet cells. PLoS One 10:e0131012 (2015).
2. Stachel I et al. Modulation of nuclear factor E2-related factor-2 (Nrf2) activation by the stress response gene immediate early response-3 (IER3) in colonic epithelial cells: a novel mechanism of cellular adaption to inflammatory stress. J Biol Chem 289:1917-29 (2014).

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