



# Nrf2 Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-01916
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Gene Name</b>	NFE2L2
<b>Protein Name</b>	Nuclear factor erythroid 2-related factor 2
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human Nrf2. AA range:556-605
<b>Specificity</b>	Nrf2 Polyclonal Antibody detects endogenous levels of Nrf2 protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/40000. Not yet tested in other applications.
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	NFE2L2; NRF2; Nuclear factor erythroid 2-related factor 2; NF-E2-related factor 2; NFE2-related factor 2; HEBP1; Nuclear factor; erythroid derived 2, like 2
<b>Observed Band</b>	75-100kD
<b>Cell Pathway</b>	Cytoplasm, cytosol . Nucleus . Cytosolic under unstressed conditions: ubiquitinated and degraded by the BCR(KEAP1) E3 ubiquitin ligase complex (PubMed:15601839, PubMed:21196497). Translocates into the nucleus upon induction by electrophilic agents that inactivate the BCR(KEAP1) E3 ubiquitin ligase complex (PubMed:21196497). .
<b>Tissue Specificity</b>	Widely expressed. Highest expression in adult muscle, kidney, lung, liver and in fetal muscle.
<b>Function</b>	domain:Acidic activation domain in the N-terminus, and DNA binding domain in the C-terminus.,function: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.,PTM:Phosphorylation of Ser-40 by PKC in response to oxidative stress dissociates NFE2L2 from its cytoplasmic inhibitor KEAP1, promoting its translocation into the nucleus.,similarity:Belongs to the bZIP family.,similarity:Belongs to the bZIP family. CNC subfamily.,similarity:Contains 1



bZIP domain.,subcellular location:Cytosolic under unstressed conditions, translocates into the nucleus upon induction by electr

## Background

This gene encodes a transcription factor which is a member of a small family of basic leucine zipper (bZIP) proteins. The encoded transcription factor regulates genes which contain antioxidant response elements (ARE) in their promoters; many of these genes encode proteins involved in response to injury and inflammation which includes the production of free radicals. Multiple transcript variants encoding different isoforms have been characterized for this gene. [provided by RefSeq, Sep 2015],

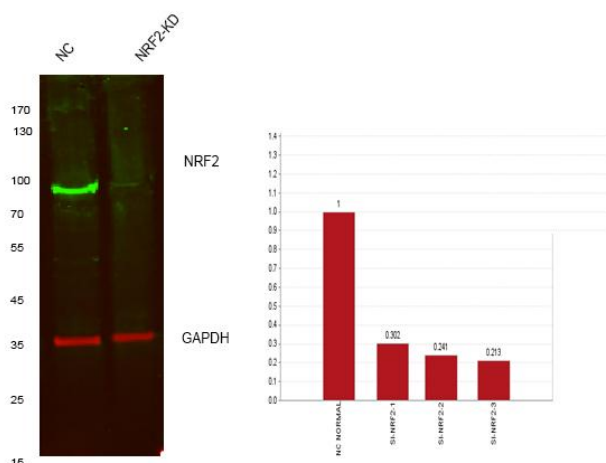
## matters needing attention

Avoid repeated freezing and thawing!

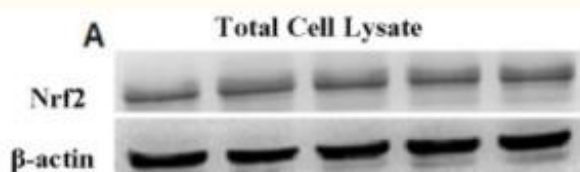
## Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

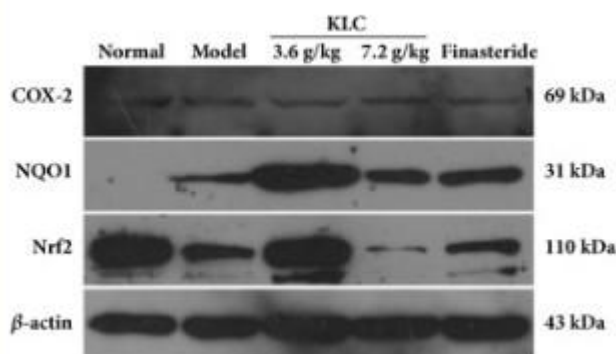
## Products Images



Western blot analysis of lysates from 1)Hela cell , 2)Hela cells knockdown by NRF2-siRNA (F:CAUUGAUGUUUCUGAUCUATT,R:UAGAUCAGAAACAUCAAUGTT), (Green) primary antibody was diluted at 1:1000, 4° over night, Dylight 800 secondary antibody(Immunoway:RS23920)was diluted at 1:10000, 37° 1hour. (Red) GAPDH Monoclonal Antibody(5B7) (Immunoway:YM3029) antibody was diluted at 1:5000 as loading control, 4° over night, Dylight 680 secondary antibody(Immunoway:RS23710)was diluted at 1:10000, 37° 1hour.

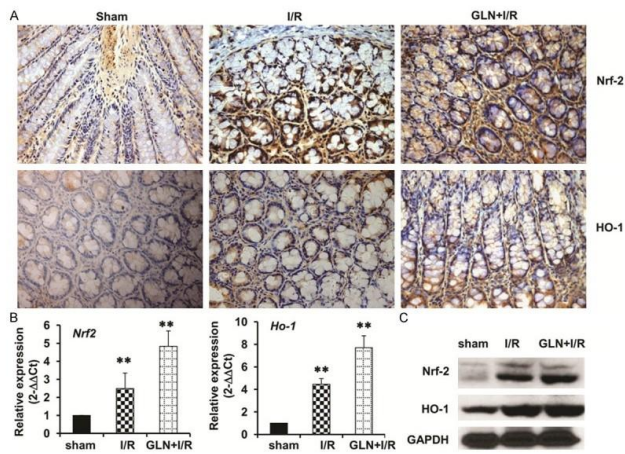


Li, Yixin, et al. "Glycogen synthase kinase 3β influences injury following cerebral ischemia/reperfusion in rats." International journal of biological sciences 12.5 (2016): 518.

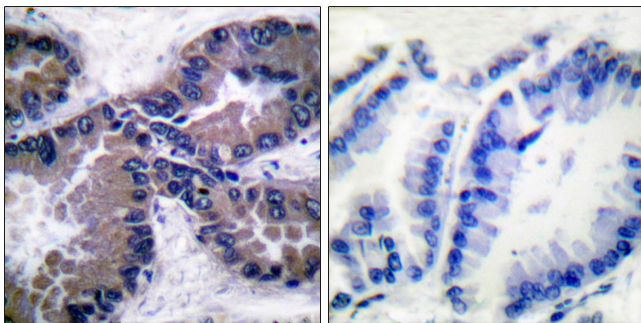


(a)

Zhang, Ling, et al. "Anti-Inflammatory and Antioxidant Effects of Kelong-Capsule on Testosterone-Induced Benign Prostatic Hyperplasia in Rats." Evidence-Based Complementary and Alternative Medicine 2018 (2018).



Wang, Ai-Li, et al. "Glutamine ameliorates intestinal ischemia-reperfusion Injury in rats by activating the Nrf2/Are signaling pathway." International journal of clinical and experimental pathology 8.7 (2015): 7896.



Immunofluorescence analysis of HUVEC cells, using Nrf2 Antibody. The picture on the right is blocked with the synthesized peptide.