

# NRF2, NFE2L2 Polyclonal antibody

Catalog Number: 16396-1-AP

Featured Product

1428 Publications

## Basic Information

### Catalog Number:

16396-1-AP

### Size:

150ul, Concentration: 700 µg/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG9489

### GenBank Accession Number:

BC011558

### GeneID (NCBI):

4780

### UNIPROT ID:

Q16236

### Full Name:

nuclear factor (erythroid-derived 2)-like 2

### Calculated MW:

605 aa, 68 kDa

### Observed MW:

110 kDa, 68 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:2000-1:12000

IP 0.5-4.0 µg for 1.0-3.0 mg of total protein lysate

IHC 1:50-1:500

IF 1:50-1:500

## Applications

### Tested Applications:

WB, IP, IF, FC, IHC, ELISA

### Cited Applications:

WB, IP, IF, FC, IHC, ColP, ChIP

### Species Specificity:

human, mouse, rat

### Cited Species:

human, goat, chicken, rat, yellow catfish, Seirus aurocapilla, mouse, ducks, monkey, rabbit

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

### Positive Controls:

WB : HepG2 cells, DMSO treated HeLa cells, A549 cells

IP : HeLa cells,

IHC : human liver cancer tissue, human renal cell carcinoma tissue, human breast cancer tissue, human kidney tissue, human pancreas cancer tissue, human colon cancer tissue

IF : mouse brain tissue, HepG2 cells, MG132 treated HepG2 cells

## Background Information

NRF2, also named as NFE2L2, belongs to the bZIP family and CNC subfamily. It is a transcription activator that binds to antioxidant response (ARE) elements in the promoter regions of target genes. NRF2 is important for the coordinated up-regulation of genes in response to oxidative stress. It 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. Nrf2 is a key player in the regulation of genes encoding for many antioxidant response enzymes. The expression of NRF2 may be induced under oxidative stress (PMID:14567983). In lung cancer, Nrf2 activation in malignant cells has been associated with tumor progression and chemotherapy resistance (PMID:20534738). Identifying patients with abnormal NRF2 expression may be important for selection for chemotherapy in NSCLC. As new investigators break into the emerging field of Nrf2 research, confusion regarding the correct migratory pattern of Nrf2 is causing doubts about the accuracy and reproducibility of published results. This letter provides solid evidence that the actually observed molecular weight of Nrf2 is about 70kDa and 95-110 kDa. (PMID: 22703241).

## Notable Publications

Author	Pubmed ID	Journal	Application
Lin-Tao Xu	34601084	J Ethnopharmacol	WB
Noha A. Gouda	36290663	Antioxidants (Basel)	WB
Zhenmao Jia	36238566	Front Pharmacol	WB, IF

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

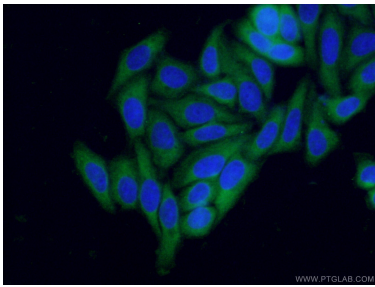
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

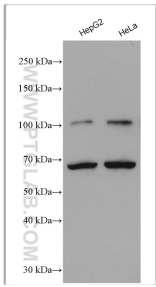
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
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This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

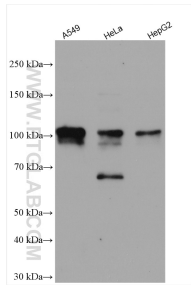
Selected Validation Data



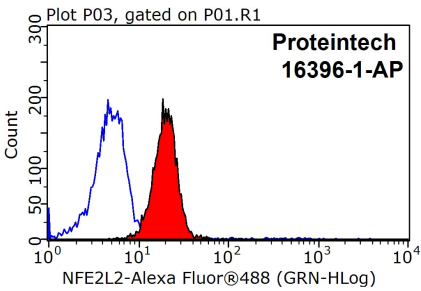
Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using 16396-1-AP (NRF2, NFE2L2 antibody) at dilution of 1:50 and Coralite488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



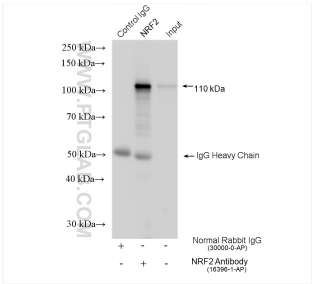
Various lysates were subjected to SDS PAGE followed by western blot with 16396-1-AP (NRF2, NFE2L2 antibody) at dilution of 1:6000 incubated at room temperature for 1.5 hours.



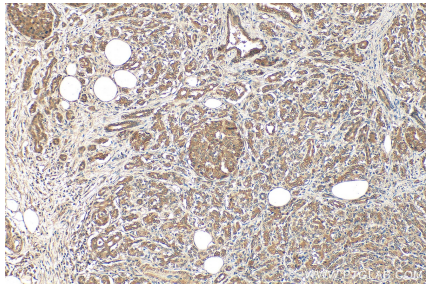
Various lysates were subjected to SDS PAGE followed by western blot with 16396-1-AP (NRF2, NFE2L2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



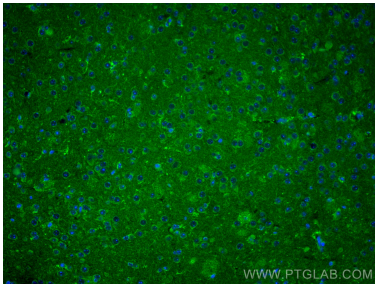
1X10<sup>6</sup> MCF-7 cells were stained with 0.2ug NRF2, NFE2L2 antibody (16396-1-AP, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1500.



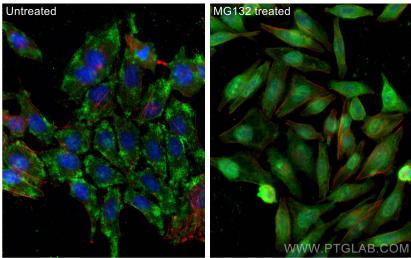
IP result of anti-NRF2, NFE2L2 (IP:16396-1-AP, 4ug; Detection:16396-1-AP 1:6000) with HeLa cells lysate 1520 ug.



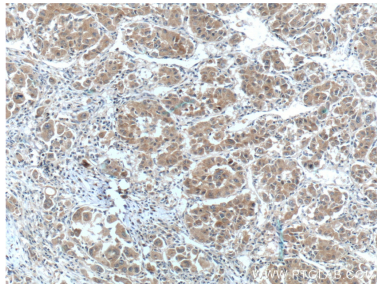
Immunohistochemical analysis of paraffin-embedded human pancreas cancer tissue slide using 16396-1-AP (NRF2, NFE2L2 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using NRF2, NFE2L2 antibody (16396-1-AP) at dilution of 1:200 and Coralite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Immunofluorescent analysis of (-20°C Ethanol) fixed MG132 treated HepG2 cells using NRF2, NFE2L2 antibody (16396-1-AP) at dilution of 1:200 and Coralite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 16396-1-AP (NRF2, NFE2L2 Antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).