For Research Use Only

# NRF2, NFE2L2 Polyclonal antibody

Catalog Number:16396-1-AP Featured Product 1931 Publications

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## Basic Information

Catalog Number:
16396-1-AP

Concentration:
700 ug/ml

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 ug for 1.0-3.0 mg of total protein lysate
IHC 1:50-1:500
IF/ICC 1:50-1:500

## Applications

Tested Applications:
WB, IHC, IF/ICC, IP, ELISA

Cited Applications:
WB, IHC, IF, IP, CoIP, chIP

Species Specificity:
human

Cited Species:
human, pig, canine, monkey, chicken, bovine, hamster, goat, ducks

***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, A549 cells, DMSO treated HeLa cells

IP : HeLa cells,

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

IF/ICC : MG132 treated HepG2 cells, 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 antioxidative 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

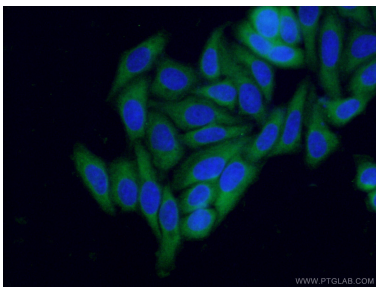
| Author | Pubmed ID | Journal | Application |
|---|---|---|---|
| Lin-Tao Xu | 34601084 | J Ethnopharmacol | WB |
| Noha A. Gouda | 36290663 | Antioxidants (Basel) | WB |
| Zhenmao Jia | 36238566 | Front Pharmacol | WB,IF |

## Storage

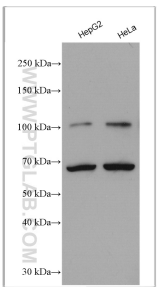
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

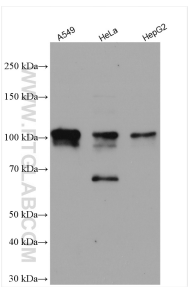
## Selected Validation Data



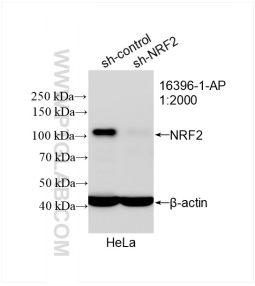
Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using 16396-1-AP (NRF2, NFE2L2 antibody) at dilution of 1:50 and CoraLite488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



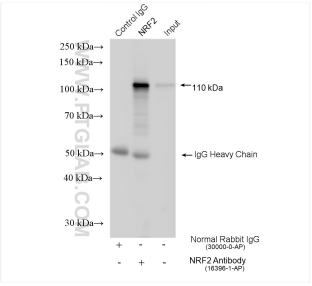

Various lysates were subjected to SDS PAGE followed by western blot with 16396-1-AP (NRF2, NFE2L2 antibody) at dilution of 1:6000 incubated at room temperature for 1.5 hours.



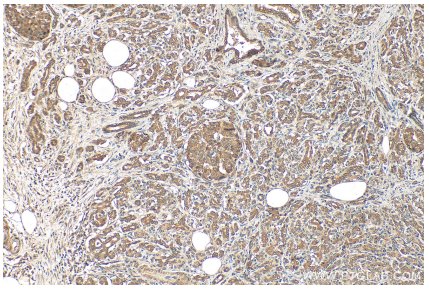

Various lysates were subjected to SDS PAGE followed by western blot with 16396-1-AP (NRF2, NFE2L2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



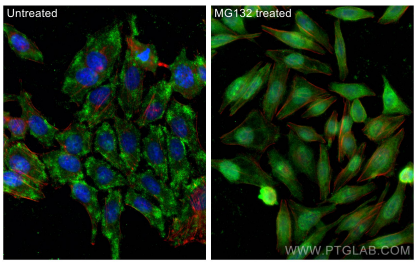

WB result of NRF2, NFE2L2 antibody (16396-1-AP; 1:2000; incubated at room temperature for 1.5 hours) with sh-Control and sh-NRF2, NFE2L2 transfected HeLa cells.



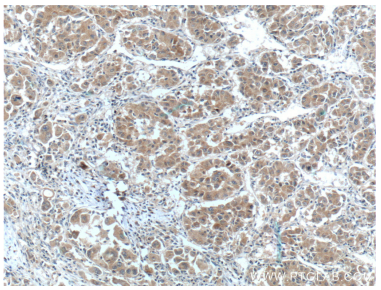

IP result of anti-NRF2, NFE2L2 (IP:16396-1-AP, 4ug; Detection:16396-1-AP 1:6000) with HeLa cells lysate 1520 ug.



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 (-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).