

For Research Use Only

NRF2, NFE2L2 Recombinant antibody

Catalog Number: 80593-1-RR

Featured Product

88 Publications



Basic Information

Catalog Number:

80593-1-RR

Size:

100ul, Concentration: 1000 ug/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:

Protein A purification

CloneNo.:

1121

Recommended Dilutions:

WB 1:1000-1:5000

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

IHC 1:200-1:800

IF/ICC 1:300-1:1200

Applications

Tested Applications:

WB, IHC, IF/ICC, FC (Intra), IP, ELISA

Cited Applications:

WB, IHC, IF, ChIP

Species Specificity:

human

Cited Species:

human

Positive Controls:

WB : MG132 treated HEK-293 cells, HEK-293 cells, HeLa cells, HepG2 cells

IP : HeLa cells,

IHC : human ovary tumor tissue, Human bowens disease, human pancreas cancer tissue

IF/ICC : MG132 treated HepG2 cells, HepG2 cells

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

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
Yue Li	36234847	Molecules	WB,IF
Jianqiang Hu	35303762	Br J Pharmacol	WB
Ye Bai	36524376	Mol Med Rep	WB

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

*** 20ul sizes contain 0.1% BSA

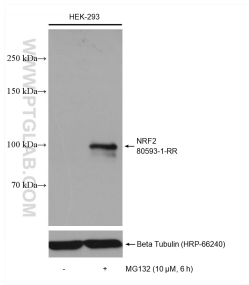
For technical support and original validation data for this product please contact:

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

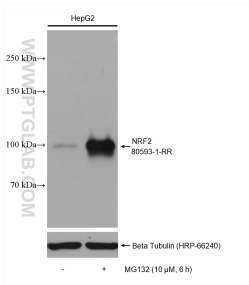
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

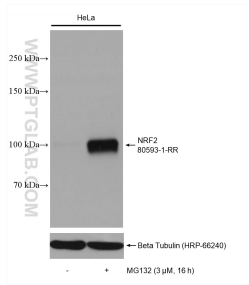
Selected Validation Data



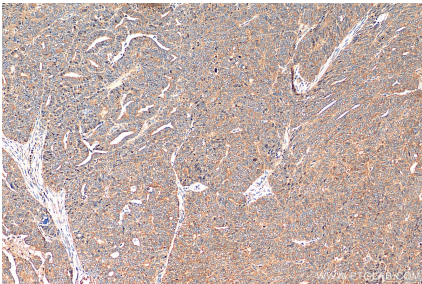
Untreated and MG132 treated HEK-293 cells were subjected to SDS PAGE followed by western blot with 80593-1-RR (NRF2, NFE2L2 antibody) at dilution of 1:2500 incubated at room temperature for 1.5 hours.



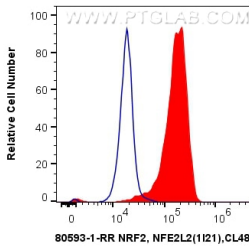
Untreated and MG132 treated HepG2 cells were subjected to SDS PAGE followed by western blot with 80593-1-RR (NRF2, NFE2L2 antibody) at dilution of 1:2500 incubated at room temperature for 1.5 hours.



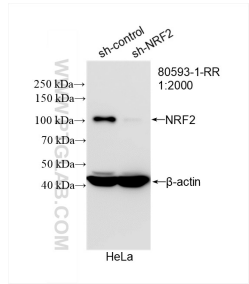
Untreated and MG132 treated HeLa cells were subjected to SDS PAGE followed by western blot with 80593-1-RR (NRF2, NFE2L2 antibody) at dilution of 1:2500 incubated at room temperature for 1.5 hours.



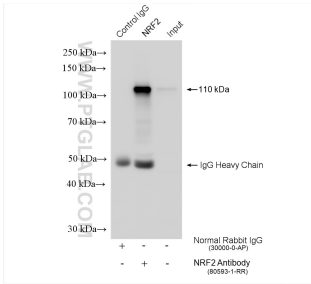
Immunohistochemical analysis of paraffin-embedded human ovary tumor tissue slide using 80593-1-RR (NRF2, NFE2L2 antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



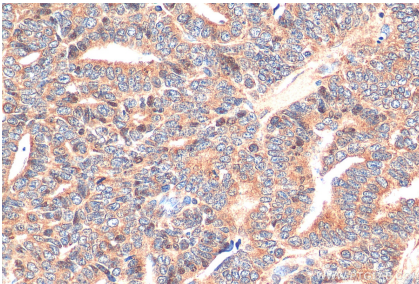
1X10⁶ MCF-7 cells were intracellularly stained with 0.4 ug Anti-Human NRF2, NFE2L2 (80593-1-RR, Clone:1121) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Isotype Control. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



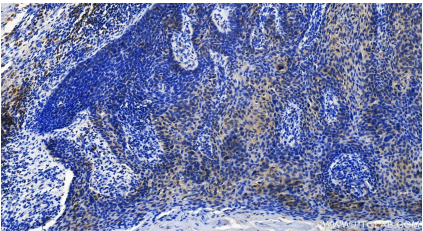
WB result of NRF2, NFE2L2 antibody (80593-1-RR; 1:2000; incubated at room temperature for 1.5 hours) with sh-Control and sh-NRF2, NFE2L2 transfected HeLa cells.



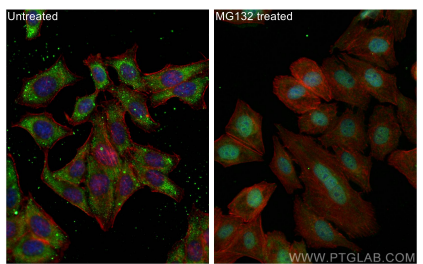
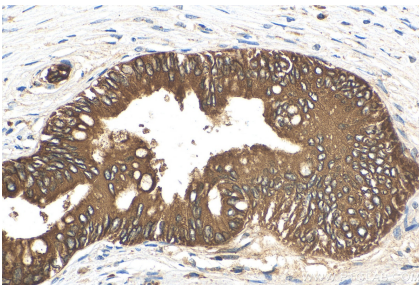
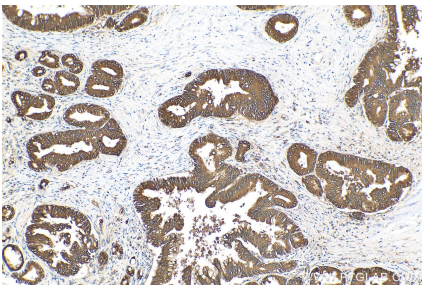
IP result of anti-NRF2, NFE2L2 (IP:80593-1-RR, 4ug; Detection:80593-1-RR 1:700) with HeLa cells lysate 1520 ug.



Immunohistochemical analysis of paraffin-embedded human ovary tumor tissue slide using 80593-1-RR (NRF2, NFE2L2 antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



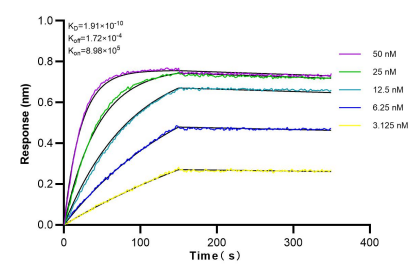
Immunohistochemical analysis of paraffin-embedded Brown disease tissue slide using 80593-1-RR (NRF2, NFE2L2 antibody) at dilution of 1:500 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human pancreas cancer tissue slide using 80593-1-RR (NRF2, NFE2L2 antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).

Immunohistochemical analysis of paraffin-embedded human pancreas cancer tissue slide using 80593-1-RR (NRF2, NFE2L2 antibody) at dilution of 1:400 (under 40x 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 (80593-1-RR, Clone: 1121) at dilution of 1:600 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).



Biolayer interferometry (BLI) kinetic assays of 80593-1-RR against Human NRF2, NFE2L2 were performed. The affinity constant is 0.191 nM.