

Basic Information

Product Name	Anti-NRF2/NFE2L2 Antibody	
Gene Name	NFE2L2	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human	
Tested Application	WB, IHC, ICC/IF, FCM, ELISA	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human NFE2L2 recombinant protein (Position: R34-N605).	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	100-110 kDa	
Dilution Ratios	Western blot (WB):	1:500-2000
	Immunohistochemistry (IHC):	1:50-400
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:50-400
	Flow Cytometry (Fixed):	1:50-200
	Enzyme linked immunosorbent assay (ELISA):	1:100-1000
	(Boiling the paraffin sections in 10mM citrate buffer, pH6.0, or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

Background Information

NFE2L2 (nuclear factor (erythroid-derived 2)-like 2) also known as NRF2 or NFE2-RELATED TRANSCRIPTION FACTOR 2, is a transcription factor that in humans is encoded by the NFE2L2 gene. NFE2, NFE2L1, and NFE2L2 comprise a family of human genes encoding basic leucine zipper (bZIP) transcription factors. NFE2L2 induces the expression of various genes including those that encode for several antioxidant enzymes, and it may play a physiological role in the regulation of oxidative stress. The NFE2L2 gene is located on 2q31.2. The identification of somatic mutations that disrupt the NRF2-KEAP1 interaction to stabilize NRF2 and increase the constitutive transcription of NRF2 target genes indicated that enhanced reactive oxygen species (ROS) detoxification and additional NRF2 functions may in fact be tumorigenic. Oncogene-directed increased expression of Nrf2 is a mechanism for the activation of the Nrf2 antioxidant program evident

in primary cells and tissues of mice expressing KRas(G12D) and BRaf(V619E), and in human pancreatic cancer.

Reference

Anti-NRF2/NFE2L2 Antibody被引用在42文献中。

Selected Validation Data

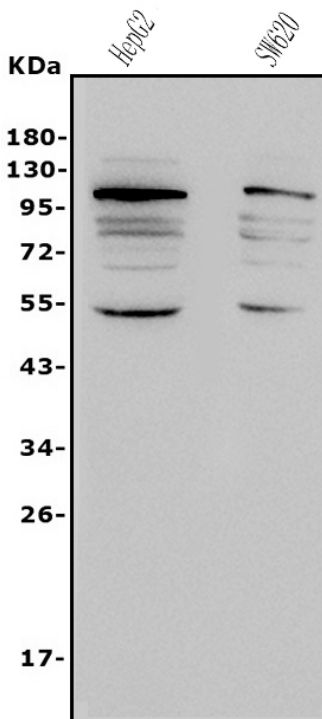


Figure 1. Western blot analysis of anti-NRF2/NFE2L2 antibody (A00078-1). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human HepG2 whole cell lysates,

Lane 2: human SW620 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-NRF2/NFE2L2 antigen affinity purified polyclonal antibody (A00078-1) and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for NRF2/NFE2L2 at approximately 100 kDa. The expected band size for NRF2/NFE2L2 is at 100 kDa.

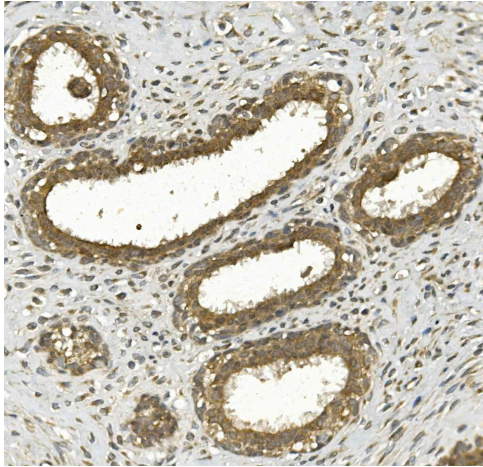


Figure 2. IHC analysis of NRF2/NFE2L2 using anti-NRF2/NFE2L2 antibody (A00078-1).

NRF2/NFE2L2 was detected in a paraffin-embedded section of human mammary cancer tissue. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.

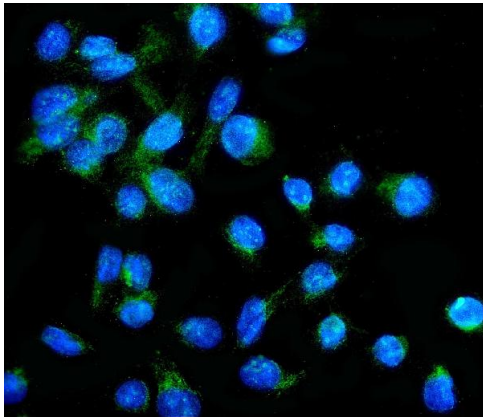


Figure 3. IF analysis of NRF2/NFE2L2 using anti-NRF2/NFE2L2 antibody (A00078-1).

NRF2/NFE2L2 was detected in an immunocytochemical section of U2OS cells. DyLight®488 Conjugated Goat Anti-Rabbit IgG (Green) (Catalog # BA1127) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).

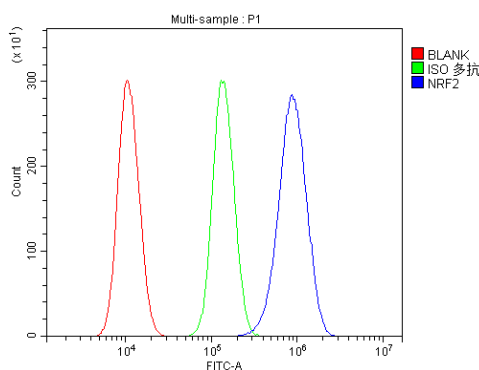


Figure 4. Flow Cytometry analysis of 293T cells using anti-NRF2/NFE2L2 antibody (A00078-1).

Overlay histogram showing 293T cells stained with A00078-1 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-NRF2/NFE2L2 Antibody (A00078-1) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.