Product datasheet

Anti-NRF1 Antibody (Clone#2G4)

Catalog Number: *M01129-1*

BOSTER
antibody and ELISA experts
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Basic Information

Product Name	Anti-NRF1 Antibody (Clone#2G4)
Gene Name	NRF1
Source	Mouse
Isotype	IgG2a
Species Reactivity	human
Tested Application	WB, IHC, ICC/IF, FCM
Contents	500 ug/ml antibody with PBS， 0.02% NaN3 , 1 mg BSA and 50% glycerol.
Immunogen	E. coli-derived human NRF1 recombinant protein (Position: D246-Q503).
concentration	500 ug/ml
Purification	protein G purified.
Observed MW	68KD
Dilution Ratios	Western blot(WB): 1:500-2000 Immunohistochemistry in paraffin section (IHC): 1:50-400 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400 Flow cytometry (FCM): 1-3 μg/1x10^6 cells (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℃ as supplied. 6 months 2 to 8℃ after reconstitution. Avoid repeated freezing and thawing.

Background Information

Nuclear respiratory factor 1, is also known as NRF1. This gene encodes a protein that homodimerizes and functions as a transcription factor which activates the expression of some key metabolic genes regulating cellular growth and nuclear genes required for respiration, heme biosynthesis, and mitochondrial DNA transcription and replication. The protein has also been associated with the regulation of neurite outgrowth. Alternative splicing results in multiple transcript variants. Confusion has occurred in bibliographic databases due to the shared symbol of NRF1 for this gene and for "nuclear factor (erythroid-derived 2)-like 1" which has an official symbol of NFE2L1.

Selected Validation Data

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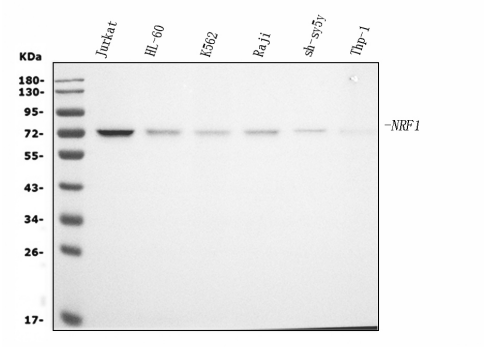

Figure 1. Western blot analysis of NRF1 using anti-NRF1 antibody (M01129-1).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.
Lane 1: human K562 whole cell lysates
Lane 2: human HL-60 whole cell lysates
Lane 3: human U2OS whole cell lysates
Lane 4: human Raji whole cell lysates
Lane 5: human Caco-2 whole cell lysates
Lane 6: human HepG2 whole cell lysates
Use mouse Anti-NRF1 1:1000, probed with a goat anti-mouse IgG-HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1001). A specific band was detected for NRF1 at approximately 68KD. The expected band size for NRF1 is at 54KD.

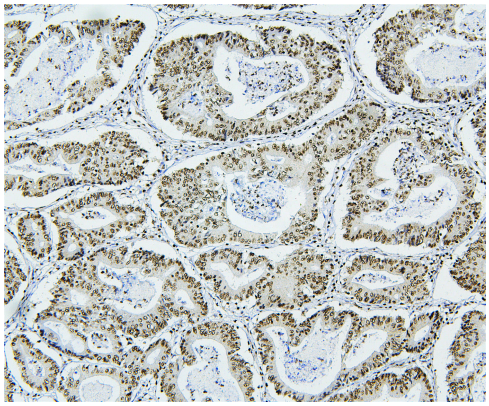

Figure 2. IHC analysis of NRF1 using anti-NRF1 antibody (M01129-1).
NRF1 was detected in paraffin-embedded section of human rectal cancer tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1µg/ml mouse anti-NRF1 Antibody (M01129-1) overnight at 4°C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC)(Catalog # SA1021) with DAB as the chromogen.

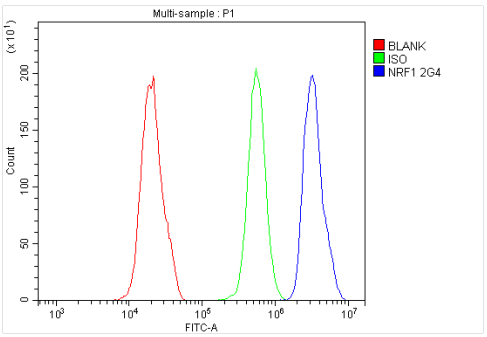

Figure 9. Flow Cytometry analysis of PC-3 cells using anti-NRF1 antibody (M01129-1).
Overlay histogram showing PC-3 cells stained with M01129-1 (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-NRF1 Antibody (M01129-1,1µg/1x10^6 cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (BA1126, 5-10µg/1x10^6 cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG (1µg/1x10^6) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

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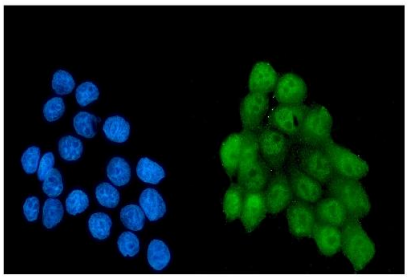

Figure 10.ICC analysis using anti-NRF1 antibody (M01129-1) was detected in immersion fixed MCF-7 cell line . Cells were stained using the Dylight488-conjugated Anti-mouse IgG Secondary Antibody (green)(Catalog#BA1127) and counterstained with DAPI (blue).