

Anti-NRF1 Antibody

Catalog # ABO11253

Product Information

Application	WB, IHC-P, ICC
Primary Accession	Q16656
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Nuclear respiratory factor 1(NRF1) detection. Tested with WB, IHC-P, ICC in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	4899
Other Names	Nuclear respiratory factor 1, NRF-1, Alpha palindromic-binding protein, Alpha-pal, NRF1
Calculated MW	53541
Application Details	Immunocytochemistry , 0.5-1 μ g/ml, Human, Mouse, Rat Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μ g/ml, Human, Rat, Mouse, By Heat Western blot, 0.1-0.5 μ g/ml, Human, Rat, Mouse
Subcellular Localization	Nucleus.
Tissue Specificity	Ubiquitously expressed with strongest expression in skeletal muscle.
Source	Eukaryota
Protein Name	Nuclear respiratory factor 1
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Thimerosal, 0.05mg Na ₃ .
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human NRF1(272-288aa QHGREDLLYAFEDQQTQ), identical to the related rat and mouse sequences.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins

Storage	At -20 °C for one year. After reconstitution, at 4 °C for one month. It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.
Sequence Similarities	Belongs to the NRF1/Ewg family.

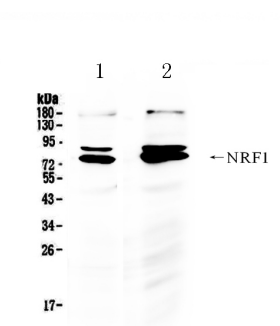
Protein Information

Name	NRF1
Function	Transcription factor that activates the expression of the EIF2S1 (EIF2-alpha) gene. Links the transcriptional modulation of key metabolic genes to cellular growth and development. Implicated in the control of nuclear genes required for respiration, heme biosynthesis, and mitochondrial DNA transcription and replication.
Cellular Location	Nucleus.
Tissue Location	Ubiquitously expressed with strongest expression in skeletal muscle

Background

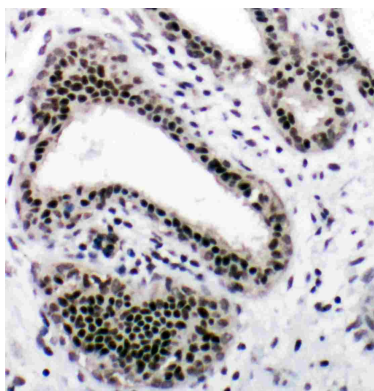
NRF1 (Nuclear Respiratory Factor 1), also known as Alpha-Pal. Gopalakrishnan and Scarpulla (1995) analyzed DNA from a panel of human/hamster cell hybrids using human-specific NRF1 PCR primers and localized the NRF1 gene to human chromosome 7. The assignment was further refined to 7q31 by cohybridization of NRF1- and chromosome 7-specific probes to human metaphase chromosomes. Efiok et al. (1994) identified genes containing alpha-Pal-binding sequences and found that these could be classified either as cellular proliferation genes, or as genes regulating the growth-responsive metabolic pathways of energy transduction, translation, and replication. Virbasius and Scarpulla (1994) noted that the nuclear-encoded mitochondrial transcription factor TFAM contains potential binding sites for NRF1, NRF2 (GABPA) and SP1 within the promoter region. With use of binding and electrophoretic mobility shift assays, DNase footprinting, and mutation analysis of recombinant proteins, they demonstrated specific and functional binding of NRF1 and NRF2 to the TFAM promoter region.

Images

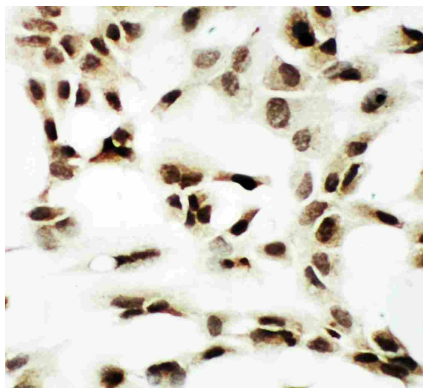


All lanes: Anti NRF1 (ABO11253) at 0.5ug/ml
 Lane 1: U2OS Whole Cell Lysate at 40ug
 Lane 2: HELA Whole Cell Lysate at 40ug
 Predicted bind size: 75KD
 Observed bind size: 75KD

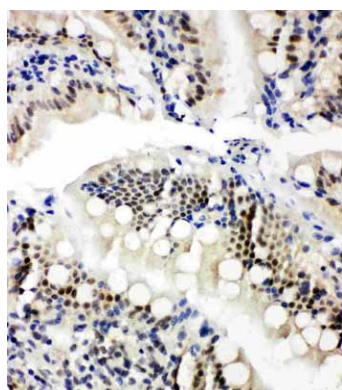
Anti-NRF1 antibody, ABO11253, IHC(P)
 IHC(P): Human Mammary Cancer Tissue



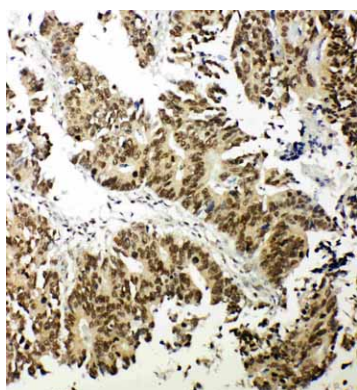
Anti-NRF1 antibody, ABO11253, ICCICC: A549 Cell



Anti-NRF1 antibody, ABO11253, IHC(P)IHC(P): Rat Intestine Tissue



Anti-NRF1 antibody, ABO11253, IHC(P)IHC(P): Human Intestinal Cance Tissue



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.