

### NRF1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14535c

#### Specification

### NRF1 Antibody (Center) - Product Information

Application Primary Accession Other Accession

Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region WB,E <u>Q16656</u> <u>Q9WU00, Q90X44, NP\_005002.3,</u> <u>NP\_001035199.1</u> Human Zebrafish, Mouse Rabbit Polyclonal Rabbit IgG 53541 226-255

### **NRF1** Antibody (Center) - Additional Information

Gene ID 4899

**Other Names** Nuclear respiratory factor 1, NRF-1, Alpha palindromic-binding protein, Alpha-pal, NRF1

#### Target/Specificity

This NRF1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 226-255 amino acids from the Central region of human NRF1.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

NRF1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

### NRF1 Antibody (Center) - 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.

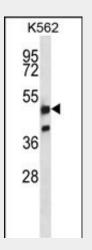
**Tissue Location** Ubiquitously expressed with strongest expression in skeletal muscle

# NRF1 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### NRF1 Antibody (Center) - Images



NRF1 Antibody (Center) (Cat. #AP14535c) western blot analysis in K562 cell line lysates (35ug/lane).This demonstrates the NRF1 antibody detected the NRF1 protein (arrow).

# NRF1 Antibody (Center) - Background

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. Alternate transcriptional splice variants, which encode the same protein, have been characterized. Additional variants encoding different protein isoforms have been described but they have not



been fully characterized. 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.

# NRF1 Antibody (Center) - References

Gonen, N., et al. J. Biol. Chem. 285(44):33602-33613(2010) Zhang, Y., et al. Biochem. J. 430(3):497-510(2010) Shao, D., et al. Mitochondrion 10(5):516-527(2010) Adam, T., et al. Biochem. Biophys. Res. Commun. 398(3):495-499(2010) Spelbrink, J.N., et al. Hum. Mol. Genet. 4(9):1591-1596(1995)