

Anti-NRF1 (RABBIT) Antibody NRF1 Antibody Catalog # ASR4404

Specification

Anti-NRF1 (RABBIT) Antibody - Product Information

Host Conjugate Target Species Reactivity Clonality Application Application Note	Rabbit Unconjugated Mouse Human, Mouse Polyclonal WB, IHC, E, I, LCI This protein A purified antibody has been tested for use in ELISA, immunohistochemistry and by western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 67 kDa in size corresponding to NRF1 by western blotting in the appropriate cell lysate or extract. Splice variants exist for this protein that may result in the detection of lower molecular weight bands.
Physical State	Liquid (sterile filtered)
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen	This protein A purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a purified recombinant mouse NRF1 protein corresponding to aa 1- 534 of the native protein.
Preservative	0.01% (w/v) Sodium Azide

Anti-NRF1 (RABBIT) Antibody - Additional Information

Gene ID 18181

Other Names 18181

Purity

This protein A purified antibody is directed against mouse NRF1. The product was purified from monospecific antiserum by protein A affinity purification. BLAST analysis was used to suggest reactivity with this protein from mouse, human, chimpanzee, dog, rat, chicken, frog and zebrafish based on very high sequence homology with the immunogen sequence. Cross reactivity with NRF1 homologues from other sources has not been determined.

Storage Condition

Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended



storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Precautions Note

This product is for research use only and is not intended for therapeutic or diagnostic applications.

Anti-NRF1 (RABBIT) Antibody - 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 (By similarity).

Cellular Location Nucleus.

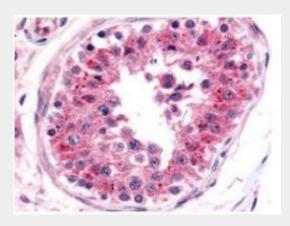
Tissue Location Widely expressed in embryonic, fetal, and adult tissues

Anti-NRF1 (RABBIT) Antibody - Protocols

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

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

Anti-NRF1 (RABBIT) Antibody - Images



Rockland's Affinity Purified anti-NRF1antibody was used at a 5 µg/ml to detect NRF1 in a variety



of tissues. This image shows NRF1 staining of human testis. The antibody shows nuclear staining in lymphocytes. Tissue was formalin-fixed and paraffin embedded. Personal Communication, Tina Roush, LifeSpanBiosciences, Seattle, WA.

Anti-NRF1 (RABBIT) Antibody - Background

NRF1 (also known as nuclear respiratory factor 1, alpha palindromic binding protein and alpha-pal) is the mammalian homolog to the erect wing (ewg) Drosophila protein that is required for proper development of the central nervous system and indirect flight muscles. In mammals NRF1 functions as a transcription factor that activates the expression of the EIF2S1 (EIF2-alpha) gene. This protein links the transcriptional modulation of key metabolic genes to cellular growth and development and has been implicated in the control of nuclear genes required for respiration, heme biosynthesis, and mitochondrial DNA transcription and replication. NRF1 forms a homodimer and binds DNA as a dimer. NRF1 shows a nuclear localization and is widely expressed in embryonic, fetal, and adult tissues. Phosphorylation of NRF1 enhances DNA binding. Multiple splice variants have been identified for this protein.