

## Basic Information

<b>Product Name</b>	Anti-NRF1 Antibody
<b>Gene Name</b>	NRF1
<b>Source</b>	Rabbit
<b>Isotype</b>	IgG
<b>Species Reactivity</b>	human, mouse, rat
<b>Tested Application</b>	WB
<b>Contents</b>	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
<b>Immunogen</b>	A synthesized peptide derived from human NRF1 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.
<b>concentration</b>	500 ug/ml
<b>Purification</b>	Affinity-chromatography
<b>Observed MW</b>	68KD
<b>Dilution Ratios</b>	Western blot (WB):1:500-2000

## 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

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

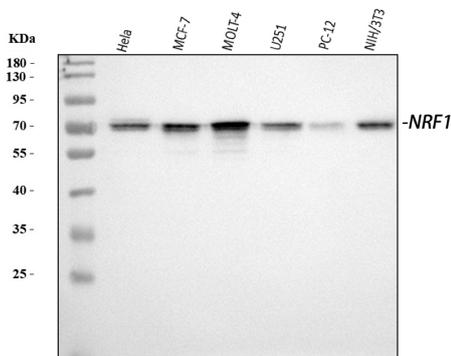


Figure 1. Western blot analysis of anti- NRF1 antibody (BM5449). The sample well of each lane was loaded with 50ug of sample under reducing conditions.

Lane 1: HELA whole cell lysates,  
Lane 2: MCF-7 whole cell lysates,  
Lane 3: MOLT-4 whole cell lysates,  
Lane 4: U251 whole cell lysates,  
Lane 5: PC-12 whole cell lysates,  
Lane 6: NIH/3T3 whole cell lysates.

Use rabbit anti- NRF1 1:1000, probed with a goat anti-rabbit IgG-HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002). A specific band was detected for NRF1 at approximately 70KD. The expected band size for NRF1 is at 54KD.