For Research Use Only

## NRF1/nuclear respiratory factor 1 Recombinant monoclonal antibody, PBS Only



Catalog Number:83092-1-PBS

**Featured Product** 

**Basic Information** 

Catalog Number:

83092-1-PBS

Source:

Rabbit

GeneID (NCBI):

4899

Isotype:

UNIPROT ID:

IgG

Q16656

Immunogen Catalog Number:

Full Name:

AG3172 nuclear respiratory factor 1

Calculated MW: 522 aa, 56 kDa Observed MW: 70 kDa Purification Method: Protein A purification

CloneNo.: 230394B1

Applications

**Tested Applications:** 

WB, IHC, IF/ICC, FC (Intra), Indirect ELISA

Species Specificity: human, mouse

**Background Information** 

NRF1, also named as Alpha-pal and NRF-1, belongs to the NRF1/Ewg family. It is a transcription factor that activates the expression of the EIF2S1 (EIF2-alpha) gene. NRF1 is implicated in the control of nuclear genes required for respiration, heme biosynthesis, and mitochondrial DNA transcription and replication. It plays a critical role in regulating the expression of many antioxidant response element (ARE)-dependent genes. NRF1 exists various isoforms and long isoform is about 67 kDa and short isoform is about 45 kDa.

Storage

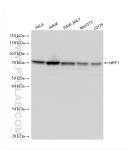
Storage:

Store at -80°C.

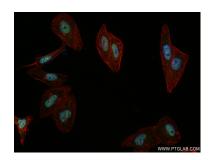
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer: PBS only, pH7.3

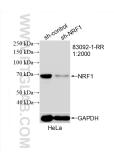
## Selected Validation Data



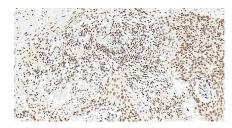
Various lysates were subjected to SDS PAGE followed by western blot with 83092-1-RR (NRF1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83092-1-PBS in a different storage buffer formulation.



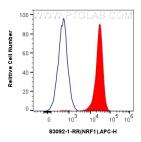
Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using NRF1/nuclear respiratory factor 1 antibody (83092-1-RR, Clone: 230394B1) at dilution of 1:300 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red). This data was developed using the same antibody clone with 83092-1-PBS in a different storage buffer formulation.



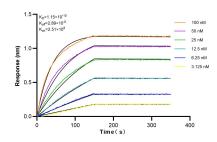
WB result of NRF1/nuclear respiratory factor 1 antibody (83092-1-RR; 1:2000; incubated at room temperature for 1.5 hours) with sh-Control and sh-NRF1/nuclear respiratory factor 1 transfected HeLa cells. This data was developed using the same antibody clone with 83092-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffinembedded human cervical squamous cancer tissue slide using 83092-1-RR (NRF 1/nuclear respiratory factor 1 antibody) at dilution of 1:500 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83092-1-PBS in a different storage buffer formulation.



1x10^6 HEK-293T cells were intracellularly stained with 0.25 ug Anti-Human NRF1 (83092-1-RR, Clone:230394B1) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug rabbit IgG isotype control (blue). Cells were fixed and permeabilized with True-Nuclear Transcription Factor Buffer Set. This data was developed using the same antibody clone with 83092-1-PBS in a different storage buffer formulation.



Biolayer interferometry (BLI) kinetic assays of 83092-1-RR against Human NRF 1/nuclear respiratory factor 1 were performed. The affinity constant is 0.115 nM.