

NRF1/nuclear respiratory factor 1 Recombinant antibody

Catalog Number: 83092-1-RR

Basic Information

Catalog Number: 83092-1-RR	GenBank Accession Number: BC016925	Purification Method: Protein A purification
Size: 1000 ug/ml	GeneID (NCBI): 4899	CloneNo.: 230394B1
Source: Rabbit	UNIPROT ID: Q16656	Recommended Dilutions: WB 1:2000-1:10000 IHC 1:250-1:1000 IF/ICC 1:150-1:600
Isotype: IgG	Full Name: nuclear respiratory factor 1	
Immunogen Catalog Number: AG3172	Calculated MW: 522 aa, 56 kDa Observed MW: 70 kDa	

Applications

Tested Applications: WB, IHC, IF/ICC, FC (Intra), ELISA	Positive Controls:
Species Specificity: human, mouse	WB : HeLa cells, Jurkat cells, RAW 264.7 cells, NIH/3T3 cells, U2OS cells
Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0	IHC : human cervical squamous cancer tissue, IF/ICC : HepG2 cells,

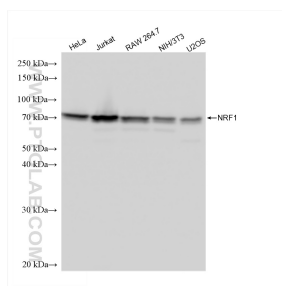
Background Information

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.

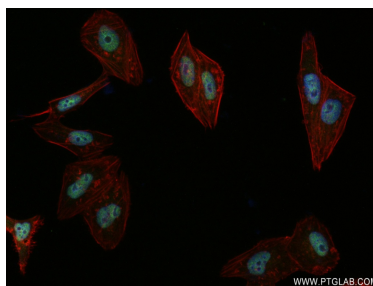
Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

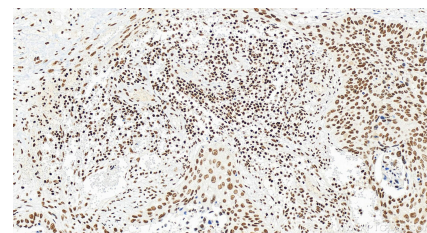
Selected Validation Data



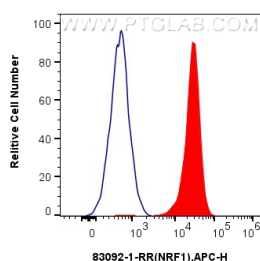
Various lysates were subjected to SDS PAGE followed by western blot with 83092-1-RR (NRF1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



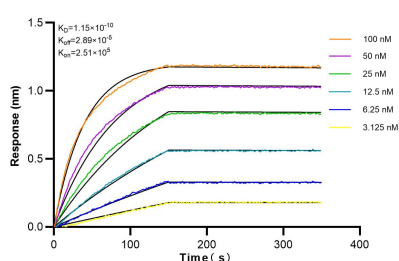
Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using NRF1/nuclear respiratory factor 1 antibody (83092-1-RR, Clone: 230394B1) at dilution of 1:300 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).



Immunohistochemical analysis of paraffin-embedded human cervical squamous cancer tissue slide using 83092-1-RR (NRF1/nuclear respiratory factor 1 antibody) at dilution of 1:500 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1x10⁶ 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 control Rabbit PolyAb (30000-O-AP) (blue). Cells were fixed and permeabilized with True-Nuclear Transcription Factor Buffer Set.



Biolayer interferometry (BLI) kinetic assays of 83092-1-RR against Human NRF1/nuclear respiratory factor 1 were performed. The affinity constant is 0.115 nM.