

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: 100ul , Concentration: 1000 ug/ml by Nanodrop;	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

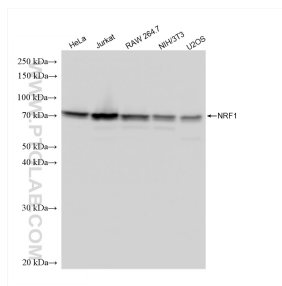
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

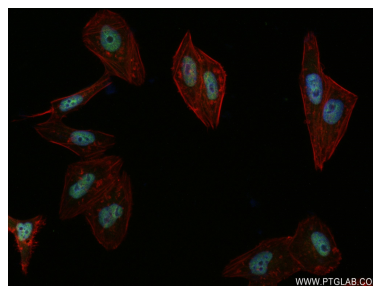
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

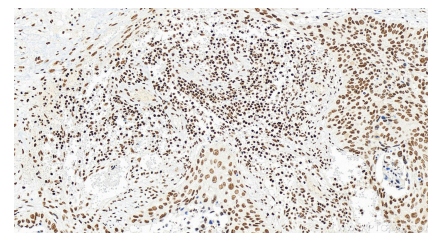
Selected Validation Data



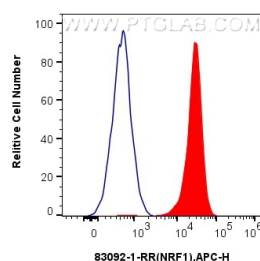
Various lysates were subjected to SDS PAGE followed by western blot with 83092-1-RR (NRF1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



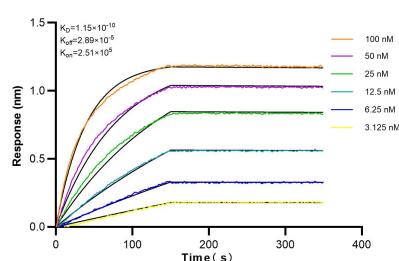
Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using NRF1/nuclear respiratory factor 1 antibody (83092-1-RR, Clone: 230394B1) at dilution of 1:300 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).



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.