For Research Use Only

NRF1/nuclear respiratory factor 1 Recombinant antibody, PBS Only

Catalog Number:83092-1-PBS



Basic Information

Catalog Number: 83092-1-PBS Size: 100ug , Concentration: 1mg/ml by Nanodrop; Source: Rabbit Isotype: IgG Immunogen Catalog Number: AG3172 GenBank Accession Number: BC016925 GeneID (NCBI): 4899 UNIPROT ID: Q16656 Full Name: 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.

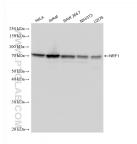
Storage

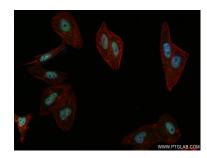
Storage: Store at -80°C. Storage Buffer: PBS Only

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

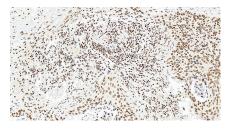
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Selected Validation Data

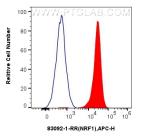


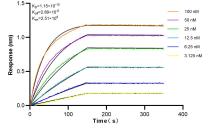


Various lysates were subjected to SDS PAGE followed by western blot with 83092-1-RR (NRF1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83092-1-PBS in a different storage buffer formulation. Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using NRF 1/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.



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 NRF 1 (83092-1-RR, Clone:230394B1) and APC-Conjugated AffiniPure Goat Anti-Rabbit 1gG(H+L)(red), or 0.25 ug Rabbit IgG control Rabbit PolyAb (30000-0-AP) (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 (BLL) kinetic assays of 83092-1-RR against Human NRF1/nuclear respiratory factor 1 were performed. The affinity constant is 0.115 nM.