

NRF1/nuclear respiratory factor 1

Monoclonal antibody

 Catalog Number: 66832-1-Ig 5 Publications

Basic Information

Catalog Number: 66832-1-Ig	GenBank Accession Number: BC016925	Purification Method: Protein A purification
Size: 1000 µg/ml	GeneID (NCBI): 4899	CloneNo.: 3C2B8
Source: Mouse	UNIPROT ID: Q16656	Recommended Dilutions: WB 1:5000-1:50000 IHC 1:500-1:2000 IF 1:50-1:500
Isotype: IgG2b	Full Name: nuclear respiratory factor 1	
Immunogen Catalog Number: AG28149	Calculated MW: 522 aa, 56 kDa Observed MW: 70 kDa	

Applications

Tested Applications: FC, IF/ICC, IHC, WB, ELISA	Positive Controls: WB : HeLa cells, HEK-293 cells, MCF-7 cells, Jurkat cells, HSC-T6 cells, NIH/3T3 cells IHC : human colon cancer tissue, IF : HepG2 cells,
Cited Applications: WB	
Species Specificity: Human, mouse, rat	
Cited Species: human, rat, mouse	
Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0	

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.

Notable Publications

Author	Pubmed ID	Journal	Application
Jingchi Sun	35324981	PLoS One	WB
Yue Wu	34221923	J Clin Transl Hepatol	WB
Fei Mu	37897405	J Pharm Pharmacol	WB

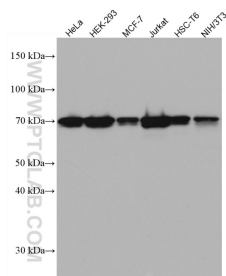
Storage

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

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

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

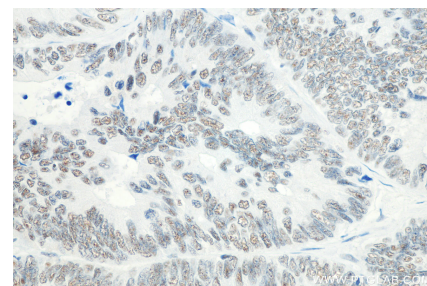
Selected Validation Data



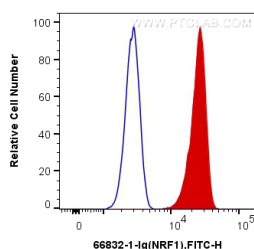
Various lysates were subjected to SDS PAGE followed by western blot with 66832-1-Ig (NRF1/nuclear respiratory factor 1) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using 66832-1-Ig (NRF1/nuclear respiratory factor 1) at dilution of 1:50 and Alexa Fluor 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 66832-1-Ig (NRF1/nuclear respiratory factor 1 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1X10⁶ HepG2 cells were intracellularly stained with 0.2 ug Anti-Human NRF1/nuclear respiratory factor 1 (66832-1-Ig, Clone:3C2B8) and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.2 ug Control Antibody. Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).