

For Research Use Only



# CoraLite® Plus 488-conjugated NRF1/nuclear respiratory factor 1 Monoclonal antibody

Catalog Number: **CL488-66832**

## Basic Information

<b>Catalog Number:</b> CL488-66832	<b>GenBank Accession Number:</b> BC016925	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul , Concentration: 1000 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 4899	<b>CloneNo.:</b> 3C2B8
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> Q16656	<b>Recommended Dilutions:</b> IF/ICC: 1:50-1:500
<b>Isotype:</b> IgG2b	<b>Full Name:</b> nuclear respiratory factor 1	<b>FC (Intra):</b> 0.40 ug per 10 <sup>6</sup> cells in a 100 µl suspension
<b>Immunogen Catalog Number:</b> AG28149	<b>Calculated MW:</b> 522 aa, 56 kDa	<b>Excitation/Emission maxima wavelengths:</b> 493 nm / 522 nm
	<b>Observed MW:</b> 70 kDa	

## Applications

<b>Tested Applications:</b> IF/ICC, FC (Intra)	<b>Positive Controls:</b>
<b>Species Specificity:</b> human	<b>IF/ICC :</b> HepG2 cells, <b>FC (Intra) :</b> 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.

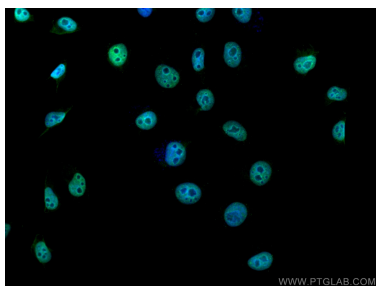
## Storage

**Storage:**  
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3  
**Aliquoting is unnecessary for -20°C storage**

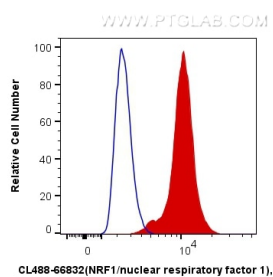
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
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## Selected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



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using CoraLite® Plus 488 NRF1 antibody (CL488-66832, Clone: 3C2B8 ) at dilution of 1:200.



1X10<sup>6</sup> HepG2 cells were intracellularly stained with 0.4 ug CoraLite® Plus 488 Anti-Human NRF1/nuclear respiratory factor 1 (CL488-66832, Clone:3C2B8) (red), or 0.4 ug Mouse IgG2b Isotype Control (CL488-66360-3, Clone: K11B8C4B5) (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).