

For Research Use Only

# CoraLite® Plus 488-conjugated GADD34 Recombinant monoclonal antibody

Catalog Number: CL488-81250



## Basic Information

<b>Catalog Number:</b> CL488-81250	<b>GenBank Accession Number:</b> BC003067	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul , Concentration: 1000 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 23645	<b>CloneNo.:</b> 4K3
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> O75807	<b>Recommended Dilutions:</b> IF/ICC: 1:50-1:500
<b>Isotype:</b> IgG	<b>Full Name:</b> protein phosphatase 1, regulatory (inhibitor) subunit 15A	<b>Excitation/Emission maxima wavelengths:</b> 493 nm / 522 nm
<b>Immunogen Catalog Number:</b> AG0578	<b>Calculated MW:</b> 73 kDa	
	<b>Observed MW:</b> 100 kDa	

## Applications

<b>Tested Applications:</b> IF/ICC	<b>Positive Controls:</b> IF/ICC : PC-3 cells,
<b>Species Specificity:</b> human, mouse	

## Background Information

GADD34, also named PPP1R15A, belongs to the PPP1R15 family. GADD34 can be triggered as a direct target of activating transcription factor4 (ATF4) under ER stress, it plays a pivotal role in the recovery of cells from shut-down of translation induced by ER stress. It recruits the serine/threonine-protein phosphatase (PP1) to dephosphorylate the translation initiation factor eIF2alpha, thereby reversing the shut-off of protein synthesis initiated by stress-inducible kinases and facilitating recovery of cells from stress. GADD34 down-regulates the TGF-beta signaling pathway by promoting dephosphorylation of TGFβ1 via PP1. It may also promote apoptosis by inducing TP53 phosphorylation on 'Ser-15'. Starvation-induced expression of GADD34 reduced mTOR activity and induced autophagy in wild-type mice, but not in GADD34 KO mice. Molecular weight of GADD34 is 100 kDa confirmed in GADD34 KO mice, and Proteintech's GADD34 antibody 81250-1-RR primarily recognizes the 100 kDa band.

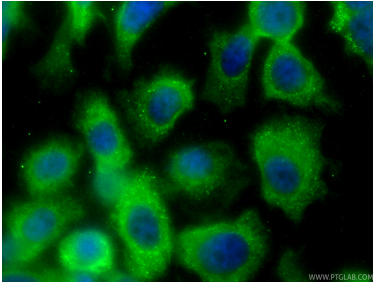
## Storage

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

## Selected Validation Data



Immunofluorescent analysis of (-20°C Ethanol) fixed PC-3 cells using CoraLite® Plus 488 GADD34 antibody (CL488-81250, Clone: 4K3 ) at dilution of 1:200.