

# GADD34 Recombinant antibody, PBS Only

Catalog Number: 81250-1-PBS

## Basic Information

<b>Catalog Number:</b> 81250-1-PBS	<b>GenBank Accession Number:</b> BC003067	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 1mg/ml	<b>GeneID (NCBI):</b> 23645	<b>CloneNo.:</b> 4K3
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> O75807	
<b>Isotype:</b> IgG	<b>Full Name:</b> protein phosphatase 1, regulatory (inhibitor) subunit 15A	
<b>Immunogen Catalog Number:</b> AG0578	<b>Calculated MW:</b> 73 kDa	
	<b>Observed MW:</b> 100 kDa	

## Applications

**Tested Applications:**  
WB, IF, Indirect ELISA

**Species Specificity:**  
Human, Mouse

## Background Information

GADD34, also named PPP1R15A, belongs to the PPP1R15 family. GADD34 can be triggered as a direct target of activating transcription factor 4 (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 eIF2 $\alpha$ , 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 TGF $\beta$ 1 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 -80°C.  
**The product is shipped with ice packs. Upon receipt, store it immediately at -80°C**

**Storage Buffer:**  
PBS Only

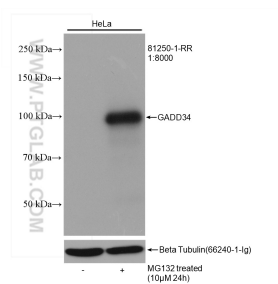
For technical support and original validation data for this product please contact:

T: 4006900926

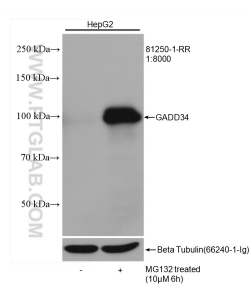
E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)W: [ptgcn.com](http://ptgcn.com)

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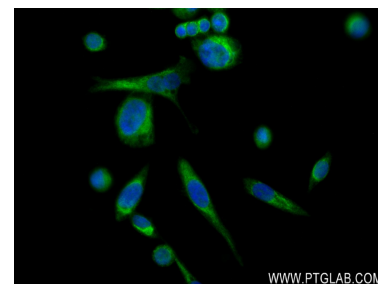
## Selected Validation Data



MG132 treated HeLa cells were subjected to SDS PAGE followed by western blot with 81250-1-RR (GADD34 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 81250-1-PBS in a different storage buffer formulation.



MG132 treated HepG2 cells were subjected to SDS PAGE followed by western blot with 81250-1-RR (GADD34 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 81250-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (-20°C Ethanol) fixed PC-3 cells using GADD34 antibody (81250-1-RR, Clone: 4K3 ) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 81250-1-PBS in a different storage buffer formulation.