For Research Use Only

GADD34 Recombinant antibody, PBS Only

Catalog Number:81250-1-PBS

## **Basic Information**

- Catalog Number: 81250-1-PBS Size: 100ug , Concentration: 1mg/ml by Nanodrop; Source: Rabbit Isotype: IgG Immunogen Catalog Number: AG0578
- GenBank Accession Number: BC003067 GeneID (NCBI): 23645 UNIPROT ID: 075807 Full Name: protein phosphatase 1, regulatory (inhibitor) subunit 15A Calculated MW: 73 kDa Observed MW: 100 kDa

Purification Method: Protein A purification CloneNo.: 4K3

**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 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 TGFB1 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 recongizes the 100 kDa band.

## Storage

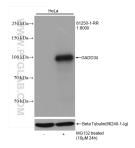
Storage: Store at -80°C. Storage Buffer: PBS Only

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

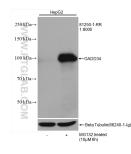
This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

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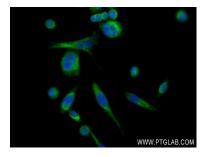
## Selected Validation Data



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 IgC(H+L) (SA00013-2). This data was developed using the same antibody clone with 81250-1-PBS in a different storage buffer formulation.