

For Research Use Only

GADD34 Recombinant antibody

Catalog Number: 81250-1-RR



Basic Information

Catalog Number: 81250-1-RR	GenBank Accession Number: BC003067	Purification Method: Protein A purification
Size: 100ul , Concentration: 400 ug/ml by Nanodrop;	GeneID (NCBI): 23645	CloneNo.: 4K3
Source: Rabbit	UNIPROT ID: O75807	Recommended Dilutions: WB 1:2000-1:16000 IF/ICC 1:50-1:500
Isotype: IgG	Full Name: protein phosphatase 1, regulatory (inhibitor) subunit 15A	
Immunogen Catalog Number: AG0578	Calculated MW: 73 kDa	
	Observed MW: 100 kDa	

Applications

Tested Applications: WB, IF/ICC, ELISA	Positive Controls:
Species Specificity: human, mouse	WB : MG132 treated HepG2 cells, MG132 treated NIH/3T3 cells, MG132 treated HeLa cells IF/ICC : PC-3 cells,

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

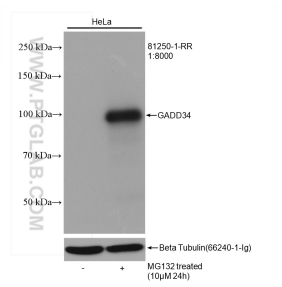
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

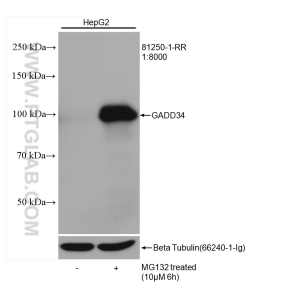
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

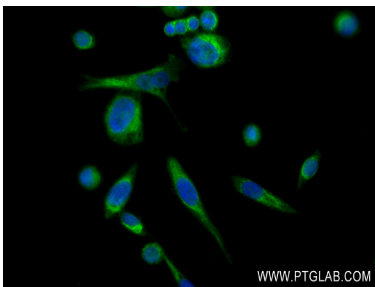
Selected Validation Data



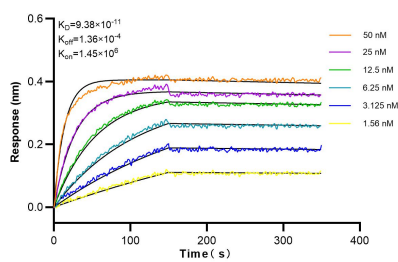
MG132 treated HeLa cells were subjected to SDS PAGE followed by western blot with 81250-1-RR (GADD34 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



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.



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 Goat Anti-Rabbit IgG(H+L) (SA00013-2).



Biolayer interferometry (BLI) kinetic assays of 81250-1-RR against Human GADD34 were performed. The affinity constant is 93.8 pM.