

GADD34 Recombinant antibody

Catalog Number: 81250-1-RR

Basic Information

Catalog Number:

81250-1-RR

Size:

400 ug/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG0578

GenBank Accession Number:

BC003067

GeneID (NCBI):

23645

UNIPROT ID:

O75807

Full Name:protein phosphatase 1, regulatory
(inhibitor) subunit 15A**Calculated MW:**

73 kDa

Observed MW:

100 kDa

Purification Method:

Protein A purification

CloneNo.:

4K3

Recommended Dilutions:

WB 1:2000-1:16000

IF/ICC 1:50-1:500

Applications

Tested Applications:

WB, IF/ICC, ELISA

Species Specificity:

human, mouse

Positive Controls: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:

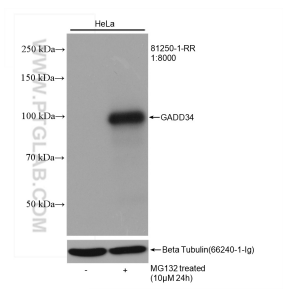
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

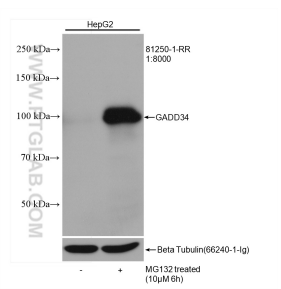
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

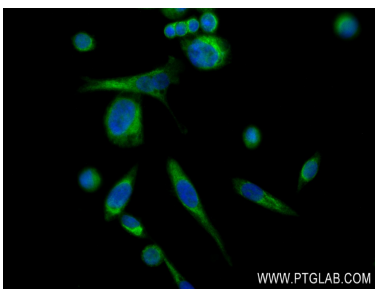
Selected Validation Data



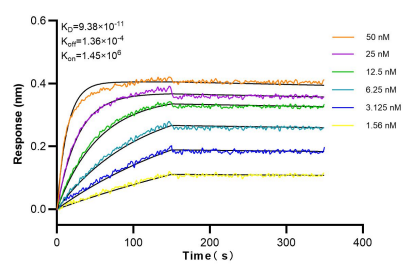
MG132 treated HeLa cells were subjected to SDS PAGE followed by western blot with 81250-1-RR (GADD34 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



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 AffiniPure 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.