

For Research Use Only

GCN1 Polyclonal antibody, PBS Only

Catalog Number:30993-1-PBS



Basic Information

Catalog Number:

30993-1-PBS

Size:

100ug , Concentration: 1 mg/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG34311

GenBank Accession Number:

BC153881

GeneID (NCBI):

10985

UNIPROT ID:

Q92616

Full Name:

GCN1 general control of amino-acid synthesis 1-like 1 (yeast)

Calculated MW:

293 kDa

Observed MW:

250 kDa

Purification Method:

Antigen affinity Purification

Applications

Tested Applications:

WB, IF/ICC, Indirect ELISA

Species Specificity:

human, mouse

Background Information

GCN1 (General Control Nonderepressible 1), also designated as GCN1L1, is a member of the GCN1 protein family. Its core function is to serve as a central regulator of the integrated stress response (ISR), acting as a key molecular adaptor that facilitates the activation of GCN2 kinase. Under stress conditions such as amino acid starvation, GCN1 binds uncharged tRNA through its C-terminal domain while concurrently binding and activating GCN2 via its N-terminal domain. This leads to the phosphorylation of eIF2 α , thereby initiating the ISR to modulate translation and gene expression. Furthermore, GCN1 participates in ribosome-associated quality control (RQC). In coordination with the RQT complex, it mediates the ubiquitination and subsequent degradation of aberrant nascent polypeptide chains on stalled ribosomes, thus preserving protein homeostasis.

Storage

Storage:

Store at -80°C.

Storage Buffer:

PBS only, pH7.3

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)

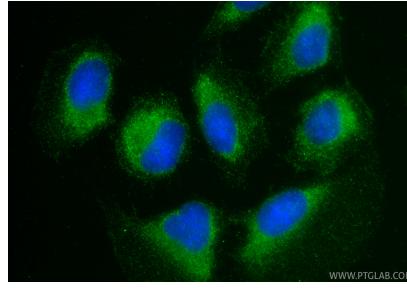
E: proteintech@ptglab.com
W: ptglab.com

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Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 30993-1-AP (GCN1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 30993-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (-20°C Ethanol) fixed U2OS cells using GCN1 antibody (30993-1-AP) at dilution of 1:200 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 30993-1-PBS in a different storage buffer formulation.