


## Product datasheet

# Anti-GCN1 antibody ab86139

★★★★★ [2 Abreviews](#) [5 References](#) [2 Images](#)

### Overview

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<b>Product name</b>	Anti-GCN1 antibody
<b>Description</b>	Rabbit polyclonal to GCN1
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IP
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Rabbit, Horse, Cow, Pig, Chimpanzee, Gorilla, Bat, Elephant 
<b>Immunogen</b>	Synthetic peptide corresponding to Human GCN1. Database link: <a href="#">Q92616</a>
<b>General notes</b>	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p>

### Properties

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<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
<b>Storage buffer</b>	pH: 6.8 Preservative: 0.09% Sodium azide Constituents: 0.1% BSA, Tris buffered saline
<b>Purity</b>	Immunogen affinity purified
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

### Applications

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**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab86139 in the following tested applications.

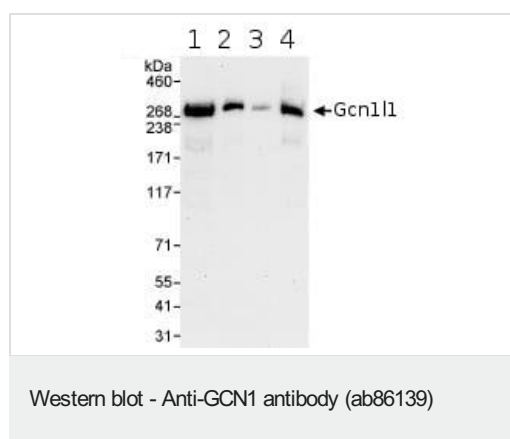
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★★ (1)	1/2000 - 1/10000. Predicted molecular weight: 293 kDa.
IP		Use at 2-5 µg/mg of lysate.

## Target

<b>Function</b>	Acts as a positive activator of the EIF2AK4/GCN2 protein kinase activity in response to amino acid starvation. Forms a complex with EIF2AK4/GCN2 on translating ribosomes; during this process, GCN1 seems to act as a chaperone to facilitate delivery of uncharged tRNAs that enter the A site of ribosomes to the tRNA-binding domain of EIF2AK4/GCN2, and hence stimulating EIF2AK4/GCN2 kinase activity. Participates in the repression of global protein synthesis and in gene-specific mRNA translation activation, such as the transcriptional activator ATF4, by promoting the EIF2AK4/GCN2-mediated phosphorylation of eukaryotic translation initiation factor 2 (eIF-2-alpha/EIF2S1) on 'Ser-52', and hence allowing ATF4-mediated reprogramming of amino acid biosynthetic gene expression to alleviate nutrient depletion.
<b>Tissue specificity</b>	Ubiquitously expressed (PubMed:9039502). Expressed in skeletal muscles, ovary and testis (PubMed:9234705).
<b>Sequence similarities</b>	Belongs to the GCN1 family. Contains 47 HEAT repeats.
<b>Cellular localization</b>	Cytoplasm. Associates with ribosomes in undifferentiated neuroblastoma cells and increases after neuronal differentiation.

## Images



**All lanes :** Anti-GCN1 antibody (ab86139) at 0.04 µg/ml

**Lane 1 :** HeLa whole cell lysate at 50 µg

**Lane 2 :** HeLa whole cell lysate at 15 µg

**Lane 3 :** HeLa whole cell lysate at 5 µg

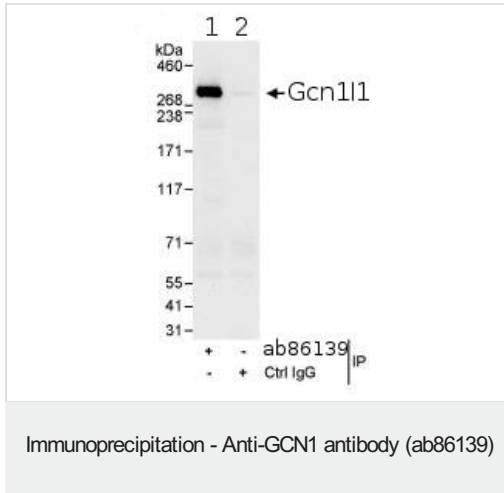
**Lane 4 :** 293T whole cell lysate at 50 µg

Developed using the ECL technique.

**Predicted band size:** 293 kDa

**Observed band size:** 293 kDa

**Exposure time:** 30 seconds



Detection of Human GCN1 by Immunoprecipitation, using ab86139 at 3µg/mg lysate. Image shows immunoprecipitated GCN1 detected with post IP WB, loading 20% of IP and using HeLa whole cell lysate at 1mg, with ab86139 at 1 µg/ml in lane 1 and control IgG in lane 2. Detection: Chemiluminescence with an exposure time of 30 seconds.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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