# abcam

#### Product datasheet

## Anti-GCN2 antibody [EPR25345-125] ab302609





### 4 Images

#### Overview

**Product name** Anti-GCN2 antibody [EPR25345-125]

**Description** Rabbit monoclonal [EPR25345-125] to GCN2

**Host species** Rabbit

Suitable for: WB **Tested applications** 

Unsuitable for: Flow Cyt (Intra),ICC/IF,IHC-P or IP

Species reactivity Reacts with: Mouse, Rat, Human

**Immunogen** Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: Whole cell lysates: Wild-type HAP1 (human chronic myelogenous leukemia near-haploid cell

> line), MEF (mouse embryonic fibroblast (immortalized)), NIH/3T3 (mouse embryonic fibroblast), Neuro-2a (mouse neuroblastoma neuroblast), MOLT-4 (human lymphoblastic leukemia T

lymphoblast), C6 (rat glial tumor glial cell).

**General notes** ab302609 does not react in: IHC-P with human, mouse, and rat; ICC with human and mouse; flow

cyt. intr. with human and mouse; immunoprecipitation with mouse.

This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or

conjugation for your experiments, please contact orders@abcam.com.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

#### **Properties**

**Form** Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

Storage buffer pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

Purity Protein A purified

**Clonality** Monoclonal

Clone number EPR25345-125

**Isotype** IgG

#### **Applications**

The Abpromise guarantee Our Abpromise guarantee covers the use of ab302609 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		1/1000. Detects a band of approximately 186 kDa (predicted molecular weight: 187 kDa).

**Application notes** Is unsuitable for Flow Cyt (Intra),ICC/IF,IHC-P or IP.

#### **Target**

**Function** Can phosphorylate the alpha subunit of EIF2 and may mediate translational control.

**Tissue specificity** Widely expressed.

**Sequence similarities**Belongs to the protein kinase superfamily. Ser/Thr protein kinase family. GCN2 subfamily.

Contains 2 protein kinase domains.

Contains 1 RWD domain.

**Domain** Kinase domain 1 is a degenerate kinase domain.

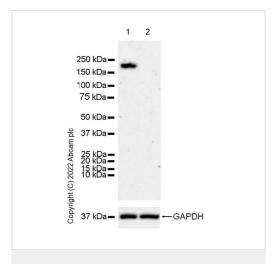
RWD domain is reported to interact with GCN1L1.

Post-translational

modifications

Autophosphorylated on threonine residues.

#### **Images**



Western blot - Anti-GCN2 antibody [EPR25345-125] (AB302609)

**All lanes :** Anti-GCN2 antibody [EPR25345-125] (ab302609) at 1/1000 dilution

**Lane 1 :** Wild-type HAP1 (human chronic myelogenous leukemia near-haploid cell line), whole cell lysate

Lane 2: EIF2AK4 (GCN2) KO HAP1 whole cell lysate

Lysates/proteins at 20 µg per lane.

#### **Secondary**

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

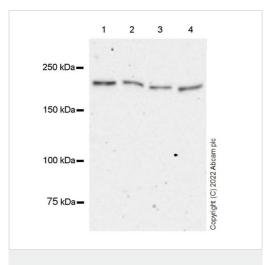
Developed using the ECL technique.

**Predicted band size:** 187 kDa **Observed band size:** 186 kDa

Exposure time: 3 minutes

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

This blot was developed using a high sensitivity ECL substrate.



Western blot - Anti-GCN2 antibody [EPR25345-125] (AB302609)

**All lanes :** Anti-GCN2 antibody [EPR25345-125] (ab302609) at 1/1000 dilution

**Lane 1 :** MEF (mouse embryonic fibroblast (immortalized)), whole cell lysate

Lane 2: NIH/3T3 (mouse embryonic fibroblast), whole cell lysate

Lane 3: Neuro-2a (mouse neuroblastoma neuroblast), whole cell

lysate

**Lane 4 :** MOLT-4 (human lymphoblastic leukemia T lymphoblast), whole cell lysate

Lysates/proteins at 20 µg per lane.

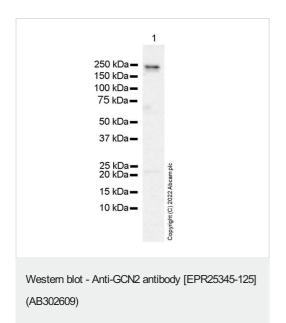
#### Secondary

**All lanes :** Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/100000 dilution

Developed using the ECL technique.

**Predicted band size:** 187 kDa **Observed band size:** 186 kDa

Exposure time: 3 minutes



Anti-GCN2 antibody [EPR25345-125] (ab302609) at 1/1000 dilution + C6 (rat glial tumor glial cell), whole cell lysate at 20 µg

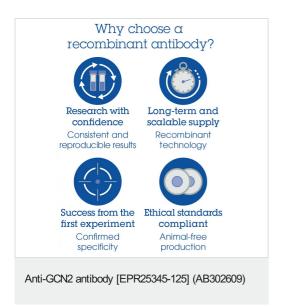
#### Secondary

Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

**Predicted band size:** 187 kDa **Observed band size:** 186 kDa

Exposure time: 3 minutes

Blocking and dilution buffer and concentration: 5% NFDM/TBST.



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

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