

**产品名称:** Phospho-GCN2 (T899) (10P11) Rabbit Monoclonal Antibody  
**产品货号:** AMRe05910



## 产品概述 (Summary)

|                        |                                                        |
|------------------------|--------------------------------------------------------|
| 产品名称 (Production Name) | Phospho-GCN2 (T899) (10P11) Rabbit Monoclonal Antibody |
| 描述 (Description)       | Recombinant rabbit monoclonal antibody                 |
| 宿主 (Host)              | Rabbit                                                 |
| 应用 (Application)       | WB,IP                                                  |
| 种属反应性 (Reactivity)     | Human                                                  |

## 产品性能 (Performance)

|                     |                                                                                                                                                                                              |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 偶联物 (Conjugation)   | Unconjugated                                                                                                                                                                                 |
| 修饰 (Modification)   | Phosphorylated                                                                                                                                                                               |
| 同种型 (Isotype)       | IgG                                                                                                                                                                                          |
| 克隆 (Clonality)      | Monoclonal                                                                                                                                                                                   |
| 形式 (Form)           | Liquid                                                                                                                                                                                       |
| 存放说明 (Storage)      | Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.                                                                                                     |
| 储存溶液 (Buffer)       | Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% New type preservative N and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle. |
| 纯化方式 (Purification) | Affinity purification                                                                                                                                                                        |

## 免疫原信息 (Immunogen)

|                        |                                             |
|------------------------|---------------------------------------------|
| 基因名 (Gene Name)        | EIF2AK4                                     |
| 别名 (Alternative Names) | GCN2-like protein; GCN2; KIAA1338; EIF2AK4; |
| 基因 ID (Gene ID)        | 440275.0                                    |
| 蛋白 ID (SwissProt ID)   | Q9P2K8.                                     |

## 产品应用 (Application)

|                          |                              |
|--------------------------|------------------------------|
| 稀释比 (Dilution Ratio)     | WB 1:500-1:2000,IP 1:20-1:50 |
| 蛋白分子量 (Molecular Weight) | 187kDa                       |

**产品名称: Phospho-GCN2 (T899) (10P11) Rabbit Monoclonal Antibody**  
**产品货号: AMRe05910**

---

## 研究背景 (Background)

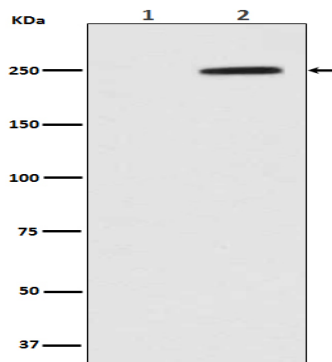
This gene encodes a member of a family of kinases that phosphorylate the alpha subunit of eukaryotic translation initiation factor-2 (EIF2), resulting in the downregulation of protein synthesis. The encoded protein responds to amino acid deprivation by binding uncharged transfer RNAs. It may also be activated by glucose deprivation and viral infection. Mutations in this gene have been found in individuals suffering from autosomal recessive pulmonary venoocclusive-disease-2. Metabolic-stress sensing protein kinase that phosphorylates the alpha subunit of eukaryotic translation initiation factor 2 (EIF2S1/eIF-2-alpha) in response to low amino acid availability (PubMed:<a href="http://www.uniprot.org/citations/25329545" target="\_blank">25329545</a>). Plays a role as an activator of the integrated stress response (ISR) required for adaptation to amino acid starvation (By similarity). EIF2S1/eIF-2-alpha phosphorylation in response to stress converts EIF2S1/eIF-2-alpha in a global protein synthesis inhibitor, leading to a global attenuation of cap-dependent translation, and thus to a reduced overall utilization of amino acids, while concomitantly initiating the preferential translation of ISR- specific mRNAs, such as the transcriptional activator ATF4, and hence allowing ATF4-mediated reprogramming of amino acid biosynthetic gene expression to alleviate nutrient depletion (By similarity). Binds uncharged tRNAs (By similarity). Involved in cell cycle arrest by promoting cyclin D1 mRNA translation repression after the unfolded protein response pathway (UPR) activation or cell cycle inhibitor CDKN1A/p21 mRNA translation activation in response to amino acid deprivation (PubMed:<a href="http://www.uniprot.org/citations/26102367" target="\_blank">26102367</a>). Plays a role in the consolidation of synaptic plasticity, learning as well as formation of long-term memory (By similarity). Plays a role in neurite outgrowth inhibition (By similarity). Plays a proapoptotic role in response to glucose deprivation (By similarity). Promotes global cellular protein synthesis repression in response to UV irradiation independently of the stress- activated protein kinase/c-Jun N-terminal kinase (SAPK/JNK) and p38 MAPK signaling pathways (By similarity). Plays a role in the antiviral response against alphavirus infection; impairs early viral mRNA translation of the incoming genomic virus RNA, thus preventing alphavirus replication (By similarity).

## 研究领域 (Research Area)

Epigenetics and Nuclear Signaling; DNA / RNA; Translation; Regulation; Signal Transduction; Protein Phosphorylation; Ser / Thr Kinases; Other Kinases

## 图片 (Image Data)

产品名称: Phospho-GCN2 (T899) (10P11) Rabbit Monoclonal Antibody  
产品货号: AMRe05910



Western blot analysis of Phospho-GCN2 (Thr899) in (1) HeLa cell lysate; (2) HeLa cell lysate treated with Calyculin.

#### 注意事项 (Note)

For research use only .