



# GCN2 Monoclonal Antibody

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| <b>Catalog No</b>                  | YP-mAb-14755                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Isotype</b>                     | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Reactivity</b>                  | Human;Mouse;Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Applications</b>                | WB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Gene Name</b>                   | EIF2AK4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Immunogen</b>                   | The antiserum was produced against synthesized peptide derived from human GCN2. AA range:865-914                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Specificity</b>                 | GCN2 Monoclonal Antibody detects endogenous levels of GCN2 protein.                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Formulation</b>                 | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Source</b>                      | Monoclonal, Mouse,IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Purification</b>                | The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Dilution</b>                    | WB 1:500-1:2000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Concentration</b>               | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Purity</b>                      | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Storage Stability</b>           | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Synonyms</b>                    | GCN2;PVOD2;EIF2AK4;Eukaryotic translation initiation factor 2-alpha kinase 4; KIAA1338;GCN2-like protein                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Observed Band</b>               | 187kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Calculated Molecular Weight</b> | 220kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Cell Pathway</b>                | Cytoplasm .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Tissue Specificity</b>          | Widely expressed (PubMed:10504407). Expressed in lung, smooth muscle cells and macrophages (PubMed:24292273).                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Function</b>                    | catalytic activity:ATP + a protein = ADP + a phosphoprotein.,domain:Kinase domain 1 is a degenerate kinase domain.,domain:RWD domain is reported to interact with GCN1L1.,function:Can phosphorylate the alpha subunit of EIF2 and may mediate translational control.,PTM:Autophosphorylated on threonine residues.,similarity:Belongs to the protein kinase superfamily. Ser/Thr protein kinase family. GCN2 subfamily.,similarity:Contains 1 RWD domain.,similarity:Contains 2 protein kinase domains.,tissue specificity:Widely expressed., |

**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. [provided by RefSeq, Mar 2014],

**matters needing attention**

Avoid repeated freezing and thawing!

**Usage suggestions**

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

**Products Images**