

## GCN2 polyclonal antibody

Catalog: BS90568

Host: Rabbit

Reactivity: Human

### Background:

The family of stress-responsive protein kinases include HRI (heme-regulated inhibitor or EIF2AK1), PKR (EIF2AK2 or TIK), PERK (EIF2AK3) and GCN2 (EIF2AK4). These proteins phosphorylate the eukaryotic translation initiation factor 2 $\alpha$  (eIF2 $\alpha$ ) on Ser 51 to regulate general and gene-specific protein synthesis. Phosphorylated eIF2 $\alpha$  acts as an inhibitor of its guanine nucleotide exchange factor eIF2B. GCN2, a unique eIF2 $\alpha$  kinase, exists in all eukaryotes from yeast to mammals. In mammals, expression of GCN2 is highest in liver and brain tissues. GCN2 primarily initiates the phosphorylation of eIF2 $\alpha$  in response to UV, but has been shown to increase phosphorylation activity in response to serum starvation. Also, substitution of Asp 83 for Ala on eIF2 $\alpha$  results in impaired phosphorylation by GCN2 and PKR, suggesting a contribution of remote residues to kinase-substrate recognition.

### Product:

Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2

### Molecular Weight:

187 kDa

### Swiss-Prot:

Q9P2K8(Human)

### Purification&Purity:

ProA affinity purified

### Applications:

WB:1:500-1:1,000

ICC:1:50-1:200

IHC:1:50-1:200

FC:1:50-1:100

### Storage&Stability:

Store at +4 °C after thawing. Aliquot store at -20 °C or -80 °C. Avoid repeated freeze / thaw cycles.

### Specificity:

GCN2 polyclonal antibody detects endogenous levels of GCN2 protein.

### DATA:

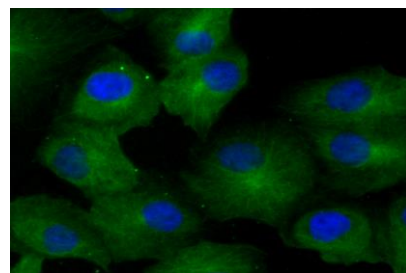
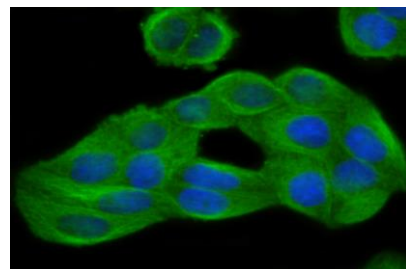


Fig1:ICC staining GCN2 in A549 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining GCN2 in HeLa cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

### Note:

For research use only, not for use in diagnostic procedure.

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