

GCN2 Rabbit mAb

Catalog No: #49575

Package Size: #49575-1 50ul #49575-2 100ul

Orders: order@signalwayantibody.comSupport: tech@signalwayantibody.com

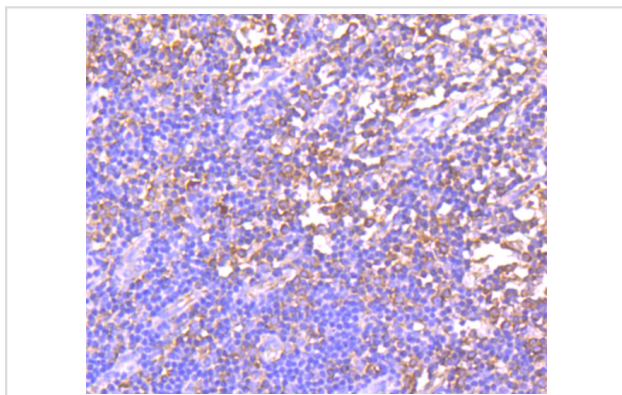
Description

Product Name	GCN2 Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	JA03-83
Purification	ProA affinity purified
Applications	WB, ICC, IHC, FC
Species Reactivity	Hu
Immunogen Description	recombinant protein
Other Names	E2AK4_HUMAN antibody Eif2ak4 antibody Eukaryotic Translation Initiation Factor 2 alpha kinase 4 antibody Eukaryotic translation initiation factor 2-alpha kinase 4 antibody GCN2 antibody GCN2 eIF2alpha kinase antibody GCN2 like protein antibody GCN2-like protein antibody KIAA1338 antibody MGCN2 antibody
Accession No.	Swiss-Prot#:Q9P2K8
Uniprot	Q9P2K8
GeneID	440275;
Calculated MW	187 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

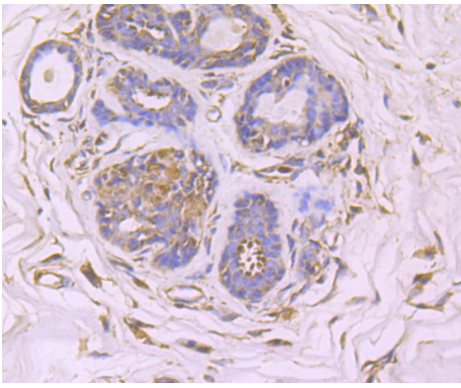
Application Details

WB: 1:500-1:1,000 IHC: 1:50-1:200 ICC: 1:50-1:200FC: 1:50-1:100

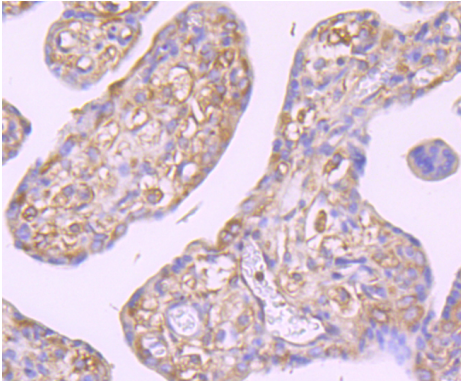
Images



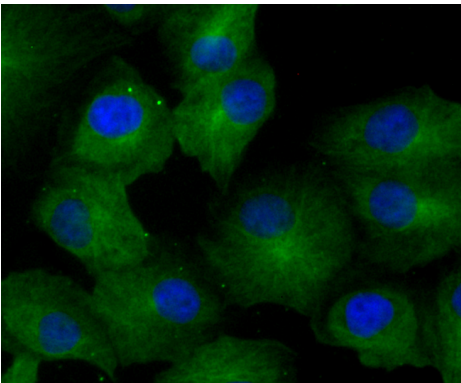
Immunohistochemical analysis of paraffin-embedded human tonsil tissue using anti-GCN2 antibody. Counter stained with hematoxylin.



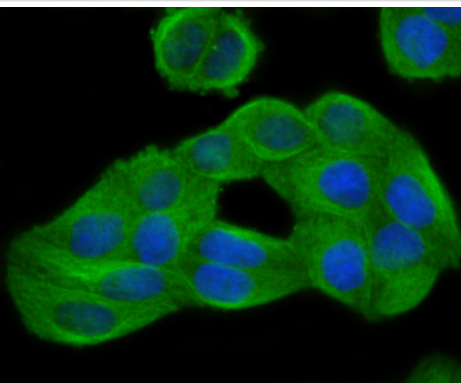
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue using anti-GCN2 antibody. Counter stained with hematoxylin.



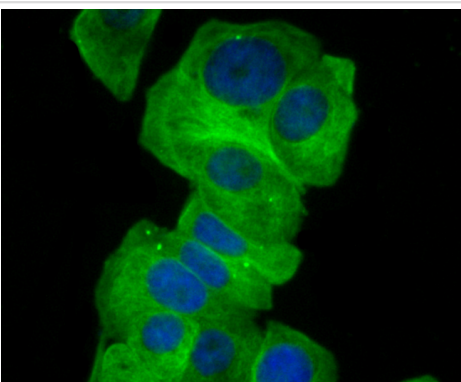
Immunohistochemical analysis of paraffin-embedded human placenta tissue using anti-GCN2 antibody. Counter stained with hematoxylin.



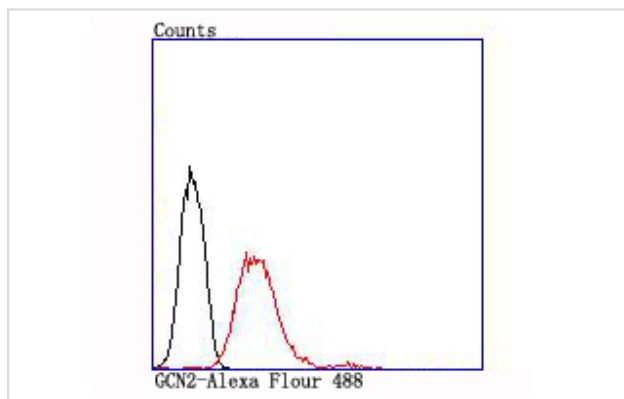
ICC staining GCN2 in A549 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



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.



ICC staining GCN2 in MCF-7 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



Flow cytometric analysis of MCF-7 cells with GCN2 antibody at 1/100 dilution (red) compared with an unlabeled control (cells without incubation with primary antibody; black).

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 α (eIF2 α) on Ser 51 to regulate general and gene-specific protein synthesis. Phosphorylated eIF2 α acts as an inhibitor of its guanine nucleotide exchange factor eIF2B. GCN2, a unique eIF2 α 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 α 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 α results in impaired phosphorylation by GCN2 and PKR, suggesting a contribution of remote residues to kinase-substrate recognition.

References

Note: This product is for in vitro research use only