Product Datasheet

Phospho-eIF-2a(S51) Rabbit mAb

Catalog No: #13338

Package Size: #13338-1 50ul #13338-2 100ul

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

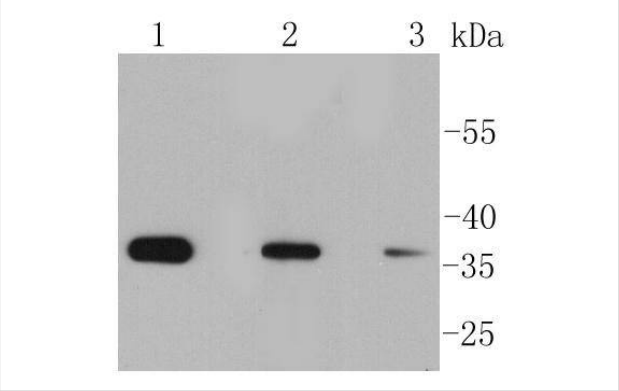
Description

Product Name	Phospho-eIF-2a(S51) Rabbit mAb
Host Species	Rabbit
Clonality	Monoclonal
Clone No.	SZ01-06
Purification	ProA affinity purified
Applications	WB, ICC/IF, IHC, IP, FC
Species Reactivity	Hu, Ms, Rt
Immunogen Description	Synthetic phospho-peptide corresponding to residues surrounding Ser51 of human eIF-2a.
Other Names	EIF 2 alpha antibody EIF 2 antibody EIF 2A antibody EIF 2alpha antibody eIF-2-alpha antibody eIF-2A antibody EIF-2alpha antibody EIF2 alpha antibody EIF2 antibody EIF2A antibody EIF2S1 antibody Eukaryotic translation initiation factor 2 subunit 1 alpha 35kDa antibody Eukaryotic translation initiation factor 2 subunit 1 alpha antibody Eukaryotic translation initiation factor 2 subunit 1 antibody Eukaryotic translation initiation factor 2 subunit alpha antibody IF2A_HUMAN antibody
Accession No.	Swiss-Prot#:Q9BY44
Uniprot	Q9BY44
GeneID	83939;
Calculated MW	36 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

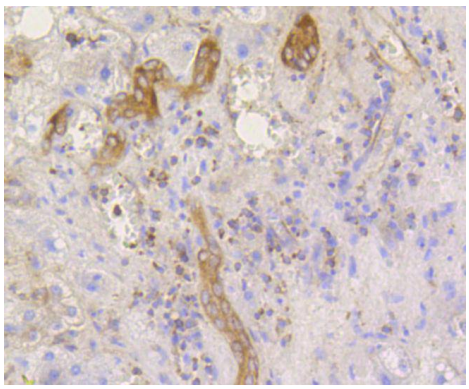
Application Details

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

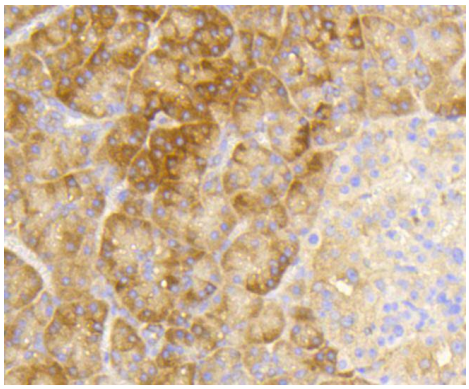
Images



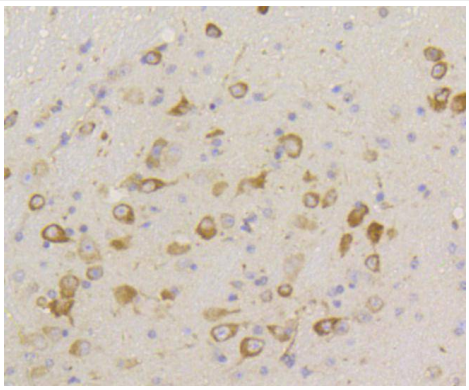
Western blot analysis of Phospho-eIF-2a(S51) on different lysates using anti-Phospho-eIF-2a(S51) antibody at 1/1,000 dilution. Positive control:
Lane 1: Hela
Lane 2: HUVEC
Lane 3: PC12



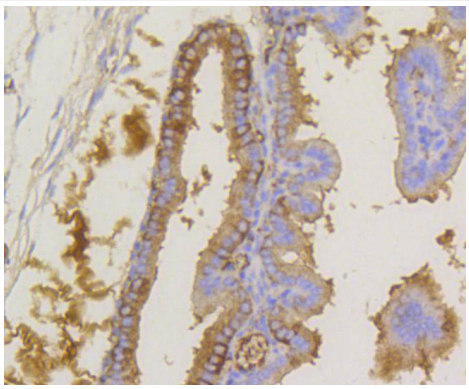
Immunohistochemical analysis of paraffin-embedded human liver tissue using anti-Phospho-eIF-2a(S51) antibody. Counter stained with hematoxylin.



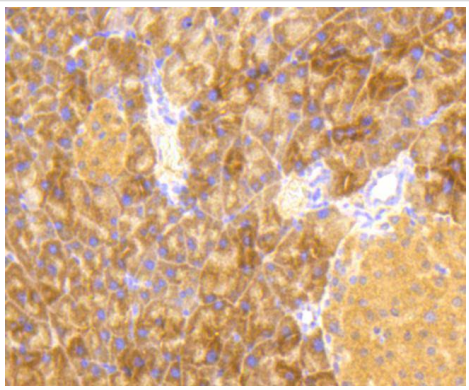
Immunohistochemical analysis of paraffin-embedded human pancreas tissue using anti-Phospho-eIF-2a(S51) antibody. Counter stained with hematoxylin.



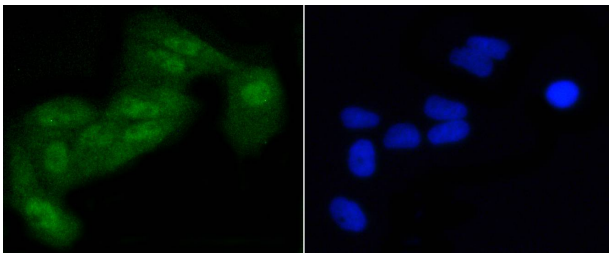
Immunohistochemical analysis of paraffin-embedded mouse brain tissue using anti-Phospho-eIF-2a(S51) antibody. Counter stained with hematoxylin.



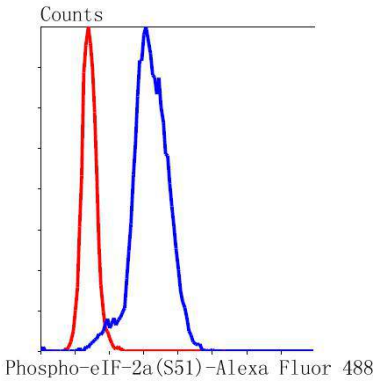
Immunohistochemical analysis of paraffin-embedded mouse placenta tissue using anti-Phospho-eIF-2a(S51) antibody. Counter stained with hematoxylin.



Immunohistochemical analysis of paraffin-embedded mouse pancreas tissue using anti-Phospho-eIF-2a(S51) antibody. Counter stained with hematoxylin.



ICC staining Phospho-eIF-2a(S51) in Hela 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 Hela cells with Phospho-eIF-2a(S51) antibody at 1/50 dilution (blue) compared with an unlabelled control (cells without incubation with primary antibody; red). Alexa Fluor 488-conjugated goat anti rabbit IgG was used as the secondary antibody.

Background

Phosphorylation of the eukaryotic initiation factor 2 (eIF2) α subunit is a well-documented mechanism to downregulate protein synthesis under a variety of stress conditions. Eukaryotic initiation factor 2 binds GTP and Met-tRNAi and transfers Met-tRNA to the 40S subunit to form the 43S preinitiation complex. eIF2 promotes a new round of translation initiation by exchanging GDP for GTP, a reaction catalyzed by eIF2B. Kinases that are activated by viral infection (PKR), endoplasmic reticulum stress (PERK/PEK), amino acid deprivation (GCN2), or heme deficiency (HRI) can phosphorylate the α subunit of eIF2. This phosphorylation stabilizes the eIF2-GDP-eIF2B complex and inhibits the turnover of eIF2B. Induction of PKR by IFN-γ and TNF-α induces potent phosphorylation of eIF2α at Ser51.

References

Note: This product is for in vitro research use only