eIF-2a (Phospho-S51) polyclonal antibody

Catalog: BS94029 Host: Rabbit Reactivity: Human, Mouse, Rat

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.

Product:

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

Molecular Weight:

36 kDa

Swiss-Prot:

Q9BY44(Human) Q8BJW6(Mouse) EntrezGene:502531(Rat)

Purification&Purity:

ProA affinity purified

Applications:

WB:1:1,000

ICC:1:50-1:200

IHC:1:50-1:200

FC:1:50-1:100

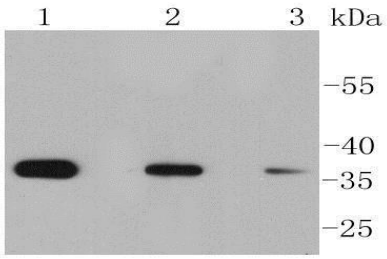
Storage&Stability:

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

Specificity:

eIF-2a (Phospho-S51) polyclonal antibody detects endogenous levels of eIF-2a protein only when phosphorylated at S51.

DATA:

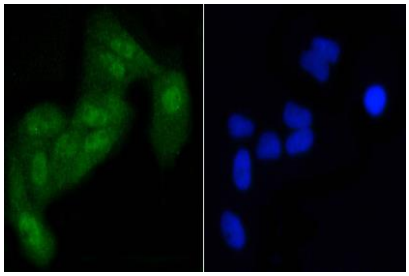


Western blot analysis of Phospho-eIF-2a(S51) on different lysates using anti-Phospho-eIF-2a(S51) antibody at 1/1,000 dilution. Positive control:

Lane 1: Hela

Lane 2: HUVEC

Lane 3: PC12



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.

Note:

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

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