

## EIF2S1 Rabbit pAb

Catalog Number: bs-3613R

Target Protein: EIF2S1

Concentration: 1mg/ml

Form: Liquid

Host: Rabbit

Clonality: Polyclonal

Isotype: IgG

Applications: WB (1:500-2000), IHC-P (1:100-500), IHC-F (1:100-500), IF (1:200-800)

Reactivity: Human, Rat (predicted:Mouse, Rabbit, Pig, Cow, Chicken)

Predicted MW: 36 kDa

Entrez Gene: 1965

Swiss Prot: P05198

Source: KLH conjugated synthetic peptide derived from human eIF2 alpha: 75-180/315.

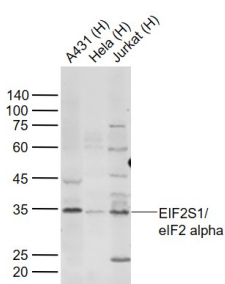
Purification: affinity purified by Protein A

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

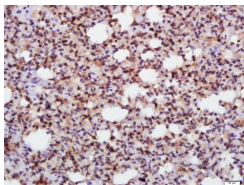
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

**Background:** eIF2 alpha is a 36 kDa protein which is ubiquitously expressed in many cell types. The eIF2 protein, which is composed of three subunits (alpha, beta and gamma), is one of the key molecules in the initiation of translation. In mammalian cells, eIF2 alpha is phosphorylated at serine 51 (human EIF2 alpha, the equivalent residue in mouse is serine 52) by at least two kinases: the haem-controlled repressor (HCR) and the interferon inducible double stranded RNA-dependent protein kinase (PKR). Phosphorylation of eIF2 alpha blocks the GDP-GTP exchange activity of eIF2 beta, resulting in the suppression of protein synthesis. The phosphorylation of eIF2 alpha is an important regulatory process in protein synthesis.

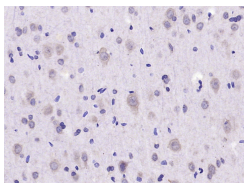
### VALIDATION IMAGES



Sample: Lane 1: A431 (Human) Cell Lysate at 30 ug Lane 2: HeLa (Human) Cell Lysate at 30 ug Lane 3: Jurkat (Human) Cell Lysate at 30 ug Primary: Anti-EIF2S1/eIF2 alpha (bs-3613R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 36-38 kD Observed band size: 35 kD



Paraformaldehyde-fixed, paraffin embedded (rat lung tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (eIF2 alpha) Polyclonal Antibody, Unconjugated (bs-3613R) at 1:500 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining



Paraformaldehyde-fixed, paraffin embedded (Rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (EIF2S1/eIF2 alpha) Polyclonal Antibody, Unconjugated (bs-3613R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

## PRODUCT SPECIFIC PUBLICATIONS

[IF=9.988] Yue Zhang. et al. Endoplasmic reticulum stress-controlled autophagic pathway promotes polystyrene microplastics-induced myocardial dysplasia in birds. ENVIRON POLLUT. 2022 Oct;311:119963 WB ; Chicken . 35973452

[IF=7.129] Pengcheng Xing. et al. Cypermethrin and/or sulfamethoxazole exposure effect on apoptosis and endoplasmic reticulum of grass carp cardiomyocyte. ECOTOX ENVIRON SAFE. 2023 Mar;252:114594 WB ; Mouse . 36753969

[IF=5.714] Ting-Ting Yu. et al. Chlorin e6-induced photodynamic effect facilitates immunogenic cell death of lung cancer as a result of oxidative endoplasmic reticulum stress and DNA damage. INT IMMUNOPHARMACOL. 2023 Feb;115:109661 WB ; Mouse,Human . 36608440

[IF=6.175] Chen Yanan. et al. Pterostilbene attenuates intrauterine growth retardation-induced colon inflammation in piglets by modulating endoplasmic reticulum stress and autophagy. Journal of Animal Science and Biotechnology. 2022 Dec;13(1):1-16 WB ; Human . 36329539

[IF=4.52] Zhu YP et al. Unification of Opposites between Two Antioxidant Transcription Factors Nrf1 and Nrf2 in Mediating Distinct Cellular Responses to the Endoplasmic Reticulum Stressor Tunicamycin. Antioxidants (Basel). 2019 Dec 19;9(1). pii: E4. WB ; Human . 31861550