### AP0745

Leader in Biomolecular Solutions for Life Science

# Phospho-eIF2α-S51 Rabbit pAb

Catalog No.: AP0745 3 Publications



# **Basic Information**

**Observed MW** 38kDa

**Calculated MW** 36kDa

Category Mouse Monoclonal Antibody

Applications WB, IF/ICC, IP, ELISA

**Cross-Reactivity** Human, Mouse, Rat

## Background

The translation initiation factor EIF2 catalyzes the first regulated step of protein synthesis initiation, promoting the binding of the initiator tRNA to 40S ribosomal subunits. Binding occurs as a ternary complex of methionyl-tRNA, EIF2, and GTP. EIF2 is composed of 3 nonidentical subunits, the 36-kD EIF2-alpha subunit (EIF2S1), the 38-kD EIF2-beta subunit (EIF2S2; MIM 603908), and the 52-kD EIF2-gamma subunit (EIF2S3; MIM 300161). The rate of formation of the ternary complex is modulated by the phosphorylation state of EIF2-alpha (Ernst et al., 1987 [PubMed 2948954]).

# **Recommended Dilutions**

WB	1:1000 - 1:2000
IP	0.5µg-4µg antibody for 200µg-400µg extracts of whole cells
IF/ICC	1:50 - 1:200

## Immunogen Information

Gene ID		
1965		

**Swiss Prot** P05198

#### Immunogen

A synthetic phosphorylated peptide around S51 of human elF2 $\alpha$  (NP\_004085.1).

#### Synonyms

EIF2; EIF-2; EIF2A; EIF-2A; EIF-2alpha; Phospho-eIF2α-S51

Contact	
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## **Product Information**

www.abclonal.com Rabbit Isotype lgG

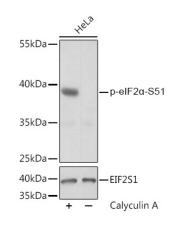
Purification Affinity purification

#### Storage

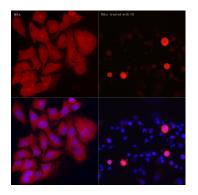
Source

Store at -20°C. Avoid freeze / thaw cycles. Buffer: PBS with 0.05% proclin300,50% glycerol,pH7.3.

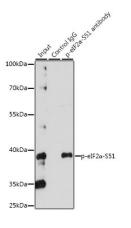
# **Validation Data**



Western blot analysis of lysates from HeLa cells, using Phospho-eIF2α-S51 Rabbit pAb (A0764).HeLa cells were treated by Calyculin A (100nM) for 30 minutes after serum-starvation overnight. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25µg per lane. Blocking buffer: 3% BSA. Detection: ECL Basic Kit (RM00020). Exposure time: 1s.



Immunofluorescence analysis of HeLa and HeLa treated with CA cells using PhosphoelF2 $\alpha$ -S51 Rabbit pAb (AP0745) at dilution of 1:50 (40x lens). Secondary antibody: Cy3 Goat Anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunoprecipitation analysis of 200  $\mu$ g extracts of HeLa cells, using 3  $\mu$ g Phospho-elF2 $\alpha$ -S51 pAb (AP0745). Western blot was performed from the immunoprecipitate using Phospho-elF2 $\alpha$ -S51 pAb (AP0745) at a dilution of 1:1000. HeLa cells were treated by Calyculin A (100 nM) at 37°C for 30 minutes after serum-starvation overnight.