

eIF-2 $\alpha$  (Phospho-Ser 52) Antibody

Catalog No: #13325

Package Size: #13325-1 50ul #13325-2 100ul

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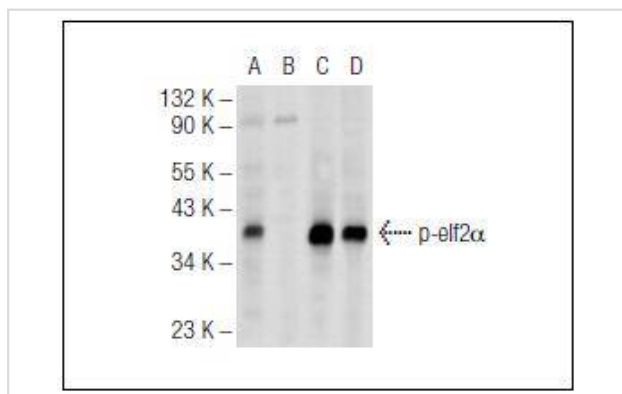
## Description

Product Name	eIF-2 $\alpha$ (Phospho-Ser 52) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Immunogen affinity purified
Applications	WB, IP, IF, IHC(P)
Species Reactivity	Hu, Ms, Rt
Immunogen Description	A short amino acid sequence containing phosphorylated Ser 52 of eIF2 $\alpha$ of human origin.
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#:P05198
Uniprot	P05198
GeneID	1965;
Calculated MW	36 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

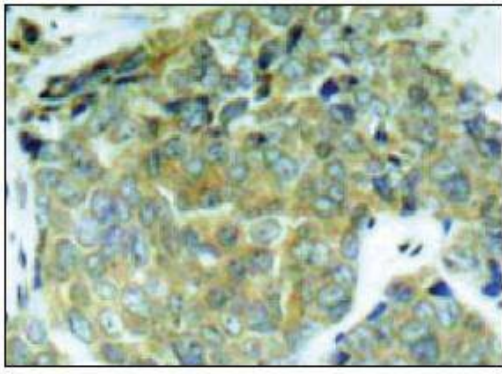
## Application Details

WB: 1:100-1:1,000IHC: 1:50-1:500IP: 1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)

## Images



Western blot analysis of eIF2 $\alpha$  phosphorylation in untreated (A, C) and lambda protein phosphatase treated (B, D) HEK293 whole cell lysates. Antibodies tested include p-eIF2 $\alpha$  (Ser 52)(A, B) and eIF2 $\alpha$ (C, D).



Immunoperoxidase staining of formalin-fixed, paraffin-embedded human breast carcinoma tissue showing cytoplasmic staining.

## Background

The initiation of protein synthesis in eukaryotic cells is regulated by interactions between protein initiation factors and RNA molecules. The eukaryotic initiation complex is composed of three subunits, designated eIF2, eIF2 and eIF2 (eukaryotic translation initiation factor 2, and, respectively), all of which work in concert to form a ternary complex with GTP and tRNA in the early stages of protein synthesis. eIF2, also known as EIF2S1 or EIF2, is a 315 amino acid subunit of the eukaryotic initiation complex that functions to bind tRNA to the 40S ribosomal subunit (in a GTP-dependent manner), thereby initiating translation. In addition, the phosphorylation state of eIF2 controls the rate of tRNA translation. When eIF2 is not phosphorylated, translation occurs at a normal rate. However, upon phosphorylation by one of several kinases, eIF2 is stabilized, thus preventing the GDP/GTP exchange reaction and slowing translation.

## References

Note: This product is for in vitro research use only