

## eIF2a(Phospho-Ser51) Antibody

Catalog No: #11279

Package Size: #11279-1 50ul #11279-2 100ul

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

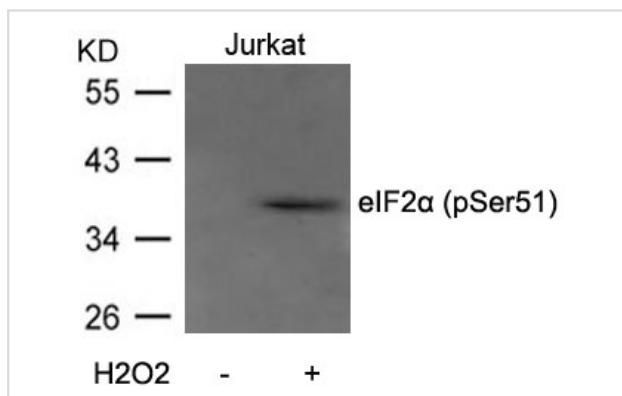
## Description

Product Name	eIF2a(Phospho-Ser51) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatography using non-phosphopeptide.
Applications	IF, WB, IHC, ELISAB B B
Species Reactivity	Human, Mouse, Rat, Dog, Pig, Fish
Specificity	The antibody detects endogenous level of eIF2a only when phosphorylated at serine 51.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around phosphorylation site of serine 51 (E-L-S(p)-R-R) derived from Human eIF2a.
Target Name	eIF2a
Modification	Phospho
Other Names	Eukaryotic translation initiation factor 2 subunit alpha; EIF-2A;
Accession No.	Swiss-Prot: P05198NCBI Protein: NP_004085.1
Uniprot	P05198
GeneID	1965;
Concentration	1.0mg/ml
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Storage	Store at -20°C for long term preservation (recommended). Store at 4°C for short term use.

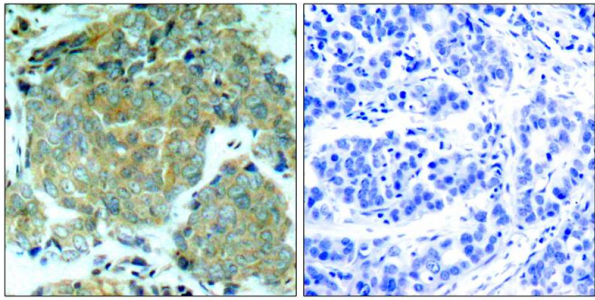
## Application Details

IF 1:50-200 WB 1:500 - 1:2000. IHC 1:100 - 1:300.

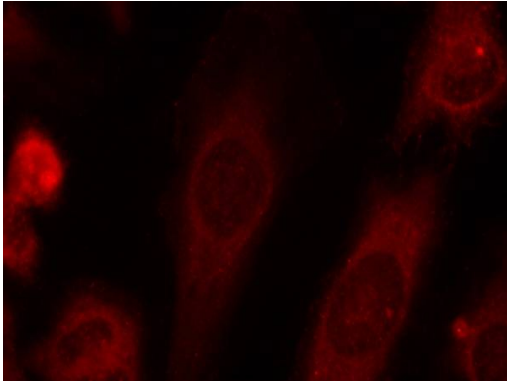
## Images



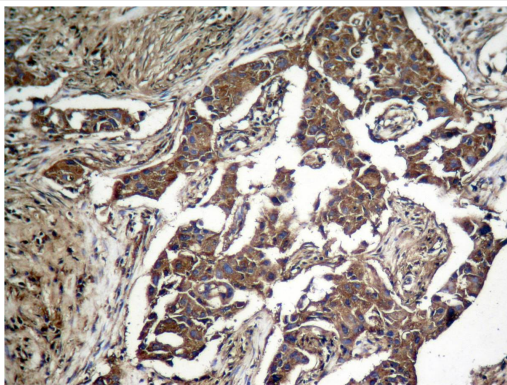
Western blot analysis of extracts from Jurkat cells untreated or treated with H<sub>2</sub>O<sub>2</sub> using eIF2a(Phospho-Ser51) Antibody #11279.



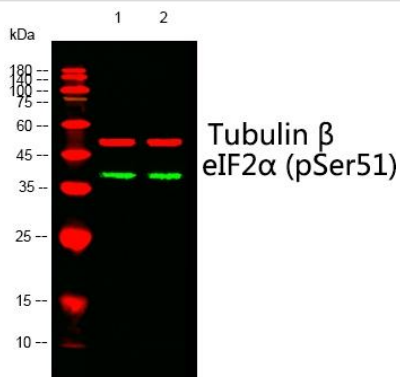
Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using eIF2 $\alpha$  (Phospho-Ser51) Antibody #11279 (left) or the same antibody preincubated with blocking peptide #51279 (right).



Immunofluorescence staining of methanol-fixed HeLa cells using eIF2 $\alpha$ (Phospho-Ser51) Antibody #11279.



Immunohistochemical analysis of paraffin-embedded human lung carcinoma tissue, using eIF2 $\alpha$  (Phospho-Ser51) Antibody #11279.



Western blot analysis of lysates from 1) KB, 2) MCF-7 cells, (Green) primary antibody was diluted at 1:1000,

## Background

Functions in the early steps of protein synthesis by forming a ternary complex with GTP and initiator tRNA. This complex binds to a 40S ribosomal subunit, followed by mRNA binding to form a 43S preinitiation complex. Junction of the 60S ribosomal subunit to form the 80S initiation complex is preceded by hydrolysis of the GTP bound to eIF-2 and release of an eIF-2-GDP binary complex. In order for eIF-2 to recycle and catalyze another round of initiation, the GDP bound to eIF-2 must exchange with GTP by way of a reaction catalyzed by eIF-2B.

Xavier Saelens, et al. (2001) J. Biol. Chem; 276: 41620 - 41628.

Hiroyuki Kubota, et al. (2003) J. Biol. Chem ; 278: 20457 - 20460.

Shijian Chu, et al. (2006) Am J Physiol Lung Cell Mol Physiol ; 291: L983 - L992.

Note: This product is for in vitro research use only