

## 35-1255: Polyclonal Antibody to eIF2 Alpha (Phospho-Ser51)

<b>Clonality :</b>	Polyclonal
<b>Application :</b>	WB,IHC,IF
<b>Reactivity :</b>	Human,Mouse,Rat
<b>Gene :</b>	EIF2S1
<b>Gene ID :</b>	1965
<b>Uniprot ID :</b>	P05198
<b>Format :</b>	Purified
<b>Alternative Name :</b>	Eukaryotic translation initiation factor 2 subunit alpha, EIF-2A
<b>Isotype :</b>	Rabbit IgG
<b>Immunogen Information :</b>	Peptide sequence around phosphorylation site of serine 51 (E-L-S(p)-R-R) derived from Human eIF2a.

### Description

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. Eileen Connolly, et al. (2006) Mol. Cell. Biol ; 26: 3955 - 3965.

### Product Info

<b>Amount :</b>	50 $\mu$ l / 100 $\mu$ l
<b>Content :</b>	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
<b>Storage condition :</b>	Store the antibody at 4°C, stable for 6 months. For long-term storage, store at -20°C. Avoid repeated freeze and thaw cycles.

### Application Note

Predicted MW: 38kd, Western blotting: 1:500~1:1000, Immunohistochemistry: 1:50~1:100, Immunofluorescence: 1:100~1:200

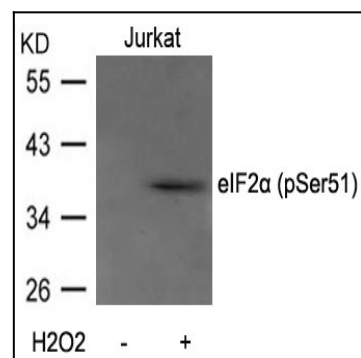


Figure 1: Western blot analysis of extracts from Jurkat cells untreated or treated with H<sub>2</sub>O<sub>2</sub> using eIF2a(Phospho-Ser51) Antibody 35-1255 .

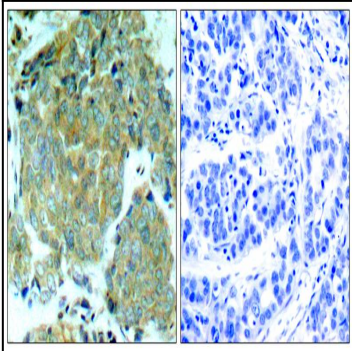


Figure 2: Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using eIF2a (Phospho-Ser51) Antibody 35-1255 (left) or the same antibody preincubated with blocking peptide 51279 (right).

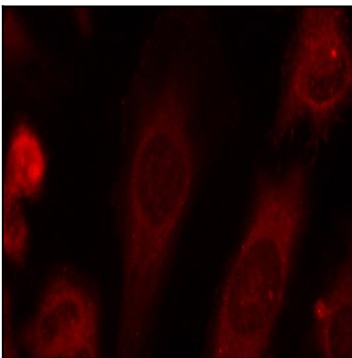


Figure 3: Immunofluorescence staining of methanol-fixed Hela cells using eIF2a(Phospho-Ser51) Antibody 35-1255 .

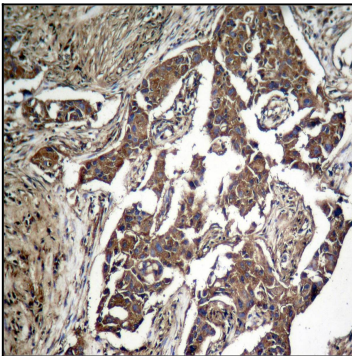


Figure 4: Immunohistochemical analysis of paraffin-embedded human lung carcinoma tissue, using eIF2a (Phospho-Ser51) Antibody 35-1255 .