

**eIF2 $\alpha$  (phospho Ser51) rabbit pAb****Cat#: orb764179 (Manual)**

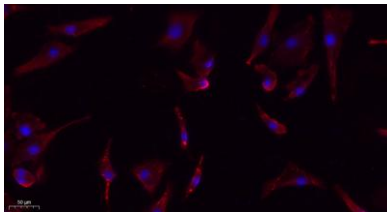
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<b>Product Name</b>	eIF2 $\alpha$ (phospho Ser51) rabbit pAb
<b>Host species</b>	Rabbit
<b>Applications</b>	IF;WB;IHC;ELISA
<b>Species Cross-Reactivity</b>	Human;Mouse;Rat;Dog;Pig;Fish
<b>Recommended dilutions</b>	IF: 1:50-200 Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/10000. Not yet tested in other applications.
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human eIF2 alpha around the phosphorylation site of Ser51. AA range:21-70
<b>Specificity</b>	Phospho-eIF2 $\alpha$ (S51) Polyclonal Antibody detects endogenous levels of eIF2 $\alpha$ protein only when phosphorylated at S51.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide..
<b>Storage</b>	Store at -20°C. Avoid repeated freeze-thaw cycles.
<b>Protein Name</b>	Eukaryotic translation initiation factor 2 subunit 1
<b>Gene Name</b>	EIF2S1
<b>Cellular localization</b>	Cytoplasm, Stress granule . Colocalizes with NANOS3 in the stress granules. .
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Clonality</b>	Polyclonal

<b>Concentration</b>	1 mg/ml
<b>Observed band</b>	38kD
<b>Human Gene ID</b>	1965
<b>Human Swiss-Prot Number</b>	P05198
<b>Alternative Names</b>	EIF2S1; EIF2A; Eukaryotic translation initiation factor 2 subunit 1; Eukaryotic translation initiation factor 2 subunit alpha; eIF-2-alpha; eIF-2A; eIF-2alpha

**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]). [supplied by OMIM, Feb 2010],



**Immunofluorescence analysis of A549. 1,primary Antibody(red) was diluted at 1:200(4°C overnight). 2, Goat Anti Rabbit IgG (H&L) - Alexa Fluor 594 Secondary antibody was diluted at 1:1000(room temperature, 50min).3, Picture B: DAPI(blue) 10min.**