

## EIF2S1

### Rabbit Anti-Human Eukaryotic Translation Initiation Factor 2 subunit 1 Clone Poly6067 pAb

<b>Catalog No.</b>	CSI14336 CSI14337	<b>Quantity:</b>	50 µl 200 µl
<b>Alternate Names:</b>	EIF-2, EIF-2A, EIF-2alpha, EIF2, EIF2A, eIF-2-alpha, eukaryotic translation initiation factor 2, subunit 1 (alpha, 35kD )		
<b>Description:</b>	eIF2α (also known as eukaryotic translation initiation factor 2, subunit 1 alpha) is a 35 kD member of the eukaryotic translation initiation factor 2 family. This cytoplasmic protein is ubiquitously expressed and can downregulate protein synthesis when phosphorylated by PKR kinase under stress conditions (hypoxia, viral infection, ER stress). Increased expression of eIF2α has been linked to progression of thyroid carcinoma. Signaling inhibited by p58 (IPK) and PKR phosphorylation. Can attenuate the unfolded protein response and inhibits translation. This protein has been shown to interact with eIF2B α, eIF2B δ, eIF2B β subunit 2, p67, p68, and PKR. eIF2α is a target for cleavage by caspase 3, caspase 6, caspase 8, and caspase 10. The Poly6067 antibody recognizes both mouse and human eIF2α and has been shown to be useful for Western blotting.		
<b>Structure:</b>	Eukaryotic translation initiation factor 2 family; 35 kD.		
<b>Gene ID:</b>	1965		
<b>Distribution:</b>	Cytoplasm, ubiquitously expressed.		
<b>Function:</b>	Downregulates protein synthesis when phosphorylated by PKR kinase under stress conditions (hypoxia, viral infection, ER stress). Increased expressed linked to progression of thyroid carcinoma.		
<b>Host:</b>	Rabbit		
<b>Immunogen:</b>	Recombinant (partial), C-terminal		
<b>Isotype:</b>	IgG		
<b>Clone:</b>	Poly6067		
<b>Regulation:</b>	Signaling inhibited by p58 (IPK), PKR, attenuates unfolded protein response, inhibits translation.		
<b>Formulation:</b>	This antibody is provided in phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 50% glycerol. <b>Precaution:</b> Sodium azide is a poisonous and hazardous substance which should be handled by trained staff only.		
<b>Purification:</b>	The antibody was purified by antigen-affinity chromatography.		



**Reactivity:** Mouse, Human

**Applications:** Western Blot

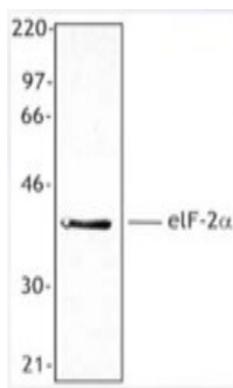
**Recommended Usage:** Each lot of this antibody is quality control tested by Western blotting. Western blotting, suggested working dilution(s): Use 10  $\mu$ l per 5 ml antibody dilution buffer for each mini-gel. It is recommended that the reagent be titrated for optimal performance for each application.

**Storage & Stability:** Upon receipt, store frozen at -20° C.

**Modification:** Phosphorylation by PKR

**Interaction:** eIF2B  $\alpha$ , eIF2B  $\delta$ , eIF2B  $\beta$  subunit 2, p67, p68, PKR, cleaved by Casp3, -6, -8, -10

Hela cell extract was resolved by electrophoresis, transferred to nitrocellulose, and probed with rabbit anti-eIF2 $\alpha$  antibody. Proteins were visualized using a donkey anti-rabbit secondary conjugated to HRP and a chemiluminescence detection system.



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