

## Purified anti-eIF4E

- Catalog # / Size:** 606902 / 200  $\mu$ l (20 Western blots)  
**Clone:** Poly6069  
**Isotype:** Rabbit IgG  
**Immunogen:** Recombinant (partial), N-terminal  
**Reactivity:** Human  
**Preparation:** The antibody was purified by antigen-affinity chromatography.  
**Formulation:** This antibody is provided in phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 50% glycerol.  
**Storage:** Upon receipt, store frozen at -20°C.

## Applications:

**Applications:** WB - *Quality tested*

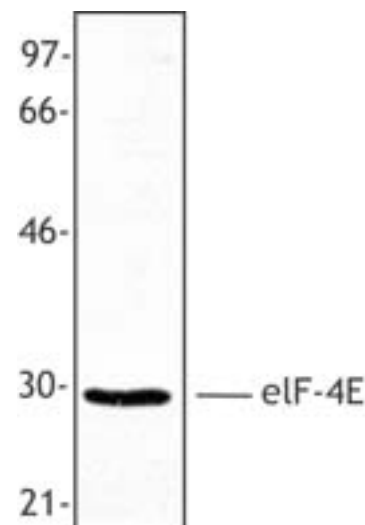
**Recommended Usage:** Each lot of this antibody is quality control tested by Western blotting. Western blotting, suggested working dilution(s): Use 10  $\mu$ l per 5 ml antibody dilution buffer for each mini-gel. It is recommended that the reagent be titrated for optimal performance for each application.

**Description:** eIF4E (also known as eukaryotic translation initiation factor 4E) is a 25 kD member of the eukaryotic initiation factor 4E family. This ubiquitously expressed cytoplasmic protein recognizes and binds 7-methylguanosine containing mRNA "CAP" during initiation of protein synthesis. eIF4E facilitates ribosome binding by inducing unwinding of mRNA secondary structures. Activity of this protein is inhibited by binding of 4E-BP and PRH; expression is increased by H<sub>2</sub>O<sub>2</sub> treatment. Activity can also be regulated by integrin  $\alpha_6\beta_4$  ligation. Phosphorylation increases binding to mRNA CAPs and formation of eIF4F complex. eIF4E forms a trimeric complex with eIF4G, eIF4A (called eIF4F). Also associates with 4E-BP and PRH. The Poly6069 antibody has recognizes human eIF4E and has been shown to be useful for Western blotting.

- Antigen References:**
1. Rychlik W, *et al.* 1987. *P. Natl. Acad. Sci. USA* 84:945.
  2. Topisirovic I, *et al.* 2003. *EMBO J.* 22:689.
  3. Shenberger J, *et al.* 2002. *Am. J. Respir. Cell Mol. Biol.* 27:250.

**Related Products:**

|   |              |                    |
|---|--------------|--------------------|
| <b>Product</b>                                    | <b>Clone</b> | <b>Application</b> |
| Purified anti-eIF2 $\alpha$                       | Poly6067     | WB                 |
| Purified anti-eIF2 $\gamma$                       | Poly6068     | WB                 |
| HRP Donkey anti-rabbit IgG (minimal x-reactivity) | Poly4064     | ELISA, IHC, WB     |



*MCF-7 cell extract was resolved by electrophoresis, transferred to nitrocellulose, and probed with rabbit anti-eIF4E antibody. Proteins were visualized using a donkey anti-rabbit secondary conjugated to HRP and a chemiluminescence detection system.*



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