

# **Product datasheet for AP02491PU-S**

## OriGene Technologies, Inc.

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### EIF4E pSer209 Rabbit Polyclonal Antibody

**Product data:** 

**Product Type:** Primary Antibodies

**Applications:** IF, IHC, WB

Recommended Dilution: Western Blot: 1/500-1/1000.

Immunofluorescence: 1/100-1/200.

Immunohistochemistry on Paraffin-Embedded Sections: 1/50-1/100.

Reactivity: Human, Mouse, Rat

**Host:** Rabbit

Clonality: Polyclonal

Immunogen: The antiserum was produced against synthesized phosphopeptide derived from human elF4E

around the phosphorylation site of serine 209 (S-G-SP-T-T).

**Specificity:** This antibody detects endogenous levels of elF4E only when phosphorylated at Serine 209.

Formulation: PBS (without Mg2+ and Ca2+), pH 7.4, 150 mM NaCl, 0.02% Sodium Azide and 50% Glycerol.

State: Aff - Purified

State: Liquid purified Ig fraction.

**Concentration:** lot specific

**Purification:** Affinity Chromatography using epitope-specific phosphopeptide.

Conjugation: Unconjugated

**Storage:** Store the antibody (in aliquots) at -20°C.

Avoid repeated freezing and thawing.

**Stability:** Shelf life: One year from despatch.

**Gene Name:** eukaryotic translation initiation factor 4E

Database Link: Entrez Gene 1977 Human

P06730





#### Background:

eIF4E, a protein modulates translation of maternal mRNAs in early embryos before the onset of zygotic transcription. eIF4E also influences the overall rate of translation. eIF4E binds to the 7 methyl GTP cap structure of eukaryotic mRNAs. Phosphorylation of eIF4E on serine 209 regulates the affinity of this protein for the 7 methyl GTP cap and/or RNA. Phosphorylation also enhances the interaction of eIF4E with eIF4G, which form a complex known as eIF4F. eIF4E phosphorylation is correlated with increased translational rate in a number of cell types. Several kinases are currently being investigated as potential regulators of eIF4E including PKC and/or the MAP kinase activated Mnk.

Synonyms:

eIF-4F 25 kDa subunit, EIF-4E, EIF4EL1, EIF4F

### **Product images:**

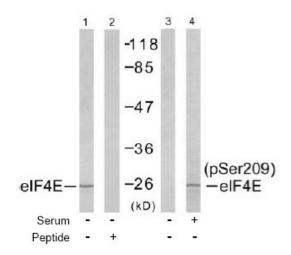


Figure 2. Western blot analysis of extract from NIH/3T3 cells untreated or treated with 10% serum (15min), using elF4E antibody (Lane 1 and 2) and elF4E pSer209 antibody (Line 3 and 4).

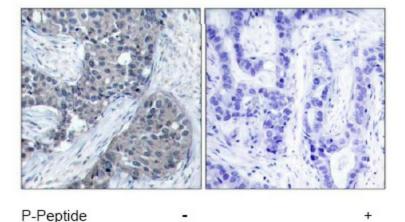


Figure 1. Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue, using eIF4E pSer209 antibody



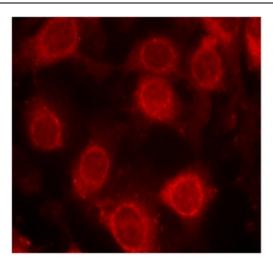


Figure 3. Immunofluorescence staining of methanol-fixed MCF7 cells using elF4E pSer209 antibody (Red).