

#11514

## eIF4G (phospho-Ser1232) Antibody

**Catalog:** #11514-1 50µl **Orders:** [order@signalwayantibody.com](mailto:order@signalwayantibody.com)  
#11514-2 100µl **Support:** [tech@signalwayantibody.com](mailto:tech@signalwayantibody.com)  
**Storage:** Store at -20°C/1 year **Web:** [www.signalwayantibody.com](http://www.signalwayantibody.com)



Application	Species Reactivity	Source	Molecular Wt.
WB IHC	Human	Rabbit Polyclonal Ab	220KD

**Description:** Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatography using non-phosphopeptide.

**Specificity:** The antibody detects endogenous level of eIF4G only when phosphorylated at serine 1232.

**Immunogen:** Peptide sequence around phosphorylation site of serine 1232 (P-V-S(p)-P-L) derived from Human eIF4G.

**Formulation:** 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.

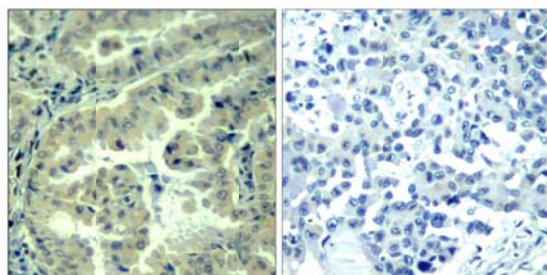
### Synonyms:

**Accession No.:** Swiss-Prot#: Q04637      NCBI Gene#: 1981  
NCBI Protein#: NP\_004944.2

**Background:** eIF4F is a multi-subunit complex, the composition of which varies with external and internal environmental conditions. It is composed of at least EIF4A, EIF4E and EIF4G1/EIF4G3. Interacts with eIF3, mutually exclusive with EIF4A1 or EIFA2, EIF4E and through its N-terminus with PAPBC1. Interacts through its C-terminus with the serine/threonine kinases MKNK1, and with MKNK2. Appears to act as a scaffold protein, holding these enzymes in place to phosphorylate EIF4E. Non-phosphorylated EIF4EBP1 competes with EIF4G1/EIF4G3 to interact with EIF4E; insulin stimulated MAP-kinase (MAPK1 and MAPK3) phosphorylation of EIF4EBP1 causes dissociation of the complex allowing EIF4G1/EIF4G3 to bind and consequent initiation of translation. EIF4G1/EIF4G3 interacts with PABPC1 to bring about circularization of the mRNA. Rapamycin can attenuate insulin stimulation mediated by FKBP. Interacts with EIF4E3. Interacts with MIF4GD. Interacts with rotavirus A NSP3; in this interaction, NSP3 takes the place of PABPC1 thereby inducing shutoff of host protein synthesis

### References:

- De Gregorio, E. et al. (1998) RNA 4, 828-836.  
Ohlmann, T. et al. (1996) EMBO J. 15, 1371-1382.  
Borman, A.M. and Kean, K.M. (1997) Virology 237, 129-136.  
Gradi, A. et al. (1998) Mol Cell Biol 18, 334-42.



Immunohistochemical analysis of paraffin-embedded human lung carcinoma tissue using eIF4G (Phospho-Ser1232) Antibody #11514 (left) or the same antibody preincubated with blocking peptide (right).

**Citation:** If you publish research using #11514 please [let us know](#).

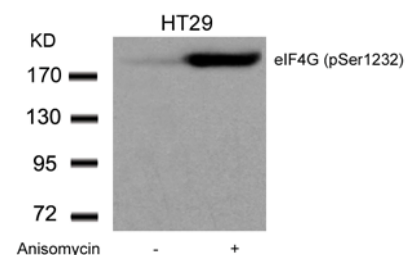
**Related Pathway:** Akt, Translation

**Note:** For western blotting, incubate membrane with diluted antibody in 5% nonfat milk, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

This product is for in vitro research use only and is not intended for use in humans or animals.

### Recommended Dilutions:

Western blotting 1:500~1:1000  
Immunohistochemistry 1:50~1:100



Western blot analysis of extracts from HT29 cells untreated or treated with Anisomycin using eIF4G (phospho-Ser1232) Antibody #11514.