

## eIF4G(Ab-1231) Antibody

Catalog No: #21514

Package Size: #21514-1 50ul #21514-2 100ul

Orders: [order@signalwayantibody.com](mailto:order@signalwayantibody.com)Support: [tech@signalwayantibody.com](mailto:tech@signalwayantibody.com)

## Description

Product Name	eIF4G(Ab-1231) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic peptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific peptide.
Applications	WB IHC IF
Species Reactivity	Hu
Specificity	The antibody detects endogenous level of total eIF4G protein.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around aa.1229~1233 (P-V-S-P-L) derived from Human eIF4G.
Target Name	eIF4G
Accession No.	Swiss-Prot: Q04637NCBI Protein: NP_004944.2
Uniprot	Q04637
GeneID	1981;
Concentration	1.0mg/ml
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.
Storage	Store at -20°C for long term preservation (recommended). Store at 4°C for short term use.

## Application Details

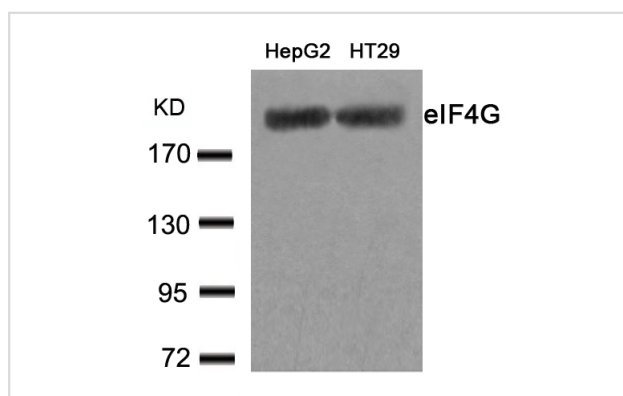
Predicted MW: 220kd

Western blotting: 1:500~1:1000

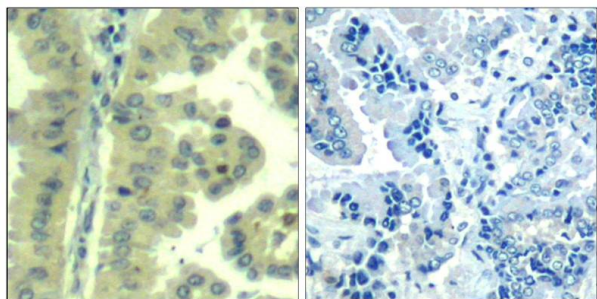
Immunohistochemistry: 1:50~1:100

Immunofluorescence: 1:100~1:200

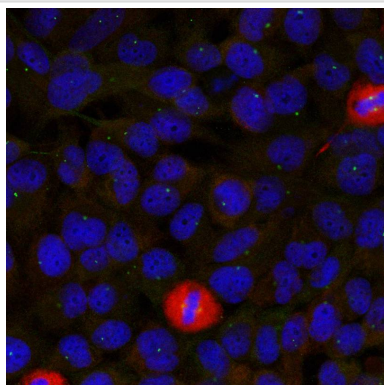
## Images



Western blot analysis of extracts from HepG2 and HT29 cells using eIF4G (Ab-1231) Antibody #21514.



Immunohistochemical analysis of paraffin-embedded human lung carcinoma tissue using eIF4G (Ab-1231) Antibody #21514 (left) or the same antibody preincubated with blocking peptide (right).



Immunofluorescence staining of methanol-fixed HeLa cells using eIF4G (Ab-1231) Antibody #21514.

## 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

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.

**Note:** This product is for in vitro research use only