

eIF4G Antibody

✓ 100 µl
(10 western blots)

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This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W, IHC-P, IF-IC, F Endogenous	H, M, R, Mk	220 kDa	Rabbit**

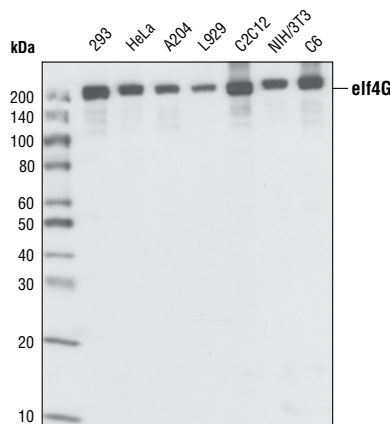
Background: The initiation of translation is an important biological event. There are a variety of factors that contribute to this process. The eIF4 family of translation initiation factors bind to the 5' m⁷GTP mRNA cap and function to unwind the secondary structure of mRNA (1,2). The amino-terminal portion of eIF4G physically associates with eIF4E and stimulates the binding of eIF4E to the mRNA cap structure (3). eIF4G also interacts with eIF3 and eIF4A (4), serving as an adaptor molecule in the eIF4 complex. Moreover, eIF4G also plays a role in internal ribosomal entry site (IRES)-mediated initiation of translation (5,6).

Specificity/Sensitivity: eIF4G Antibody detects endogenous levels of total eIF4G protein.

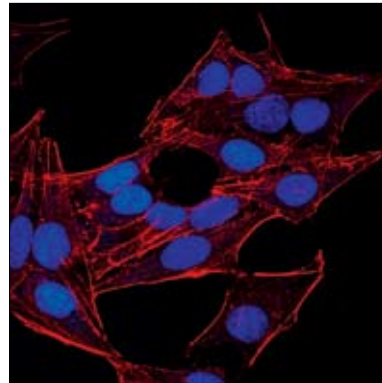
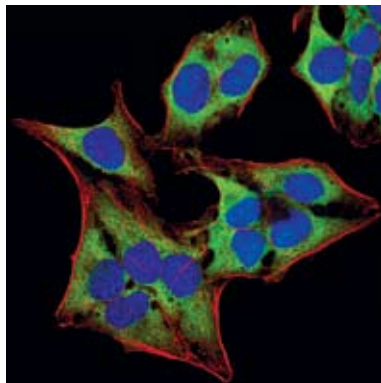
Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide (KLH-coupled) derived from a sequence of human eIF4G. Antibodies are purified by protein A and peptide affinity chromatography.

Background References:

- (1) Yan, R. and Rhoads, R.E. (1995) *Genomics* 26, 394–398.
- (2) Morley, S.J. et al. (1997) *RNA* 3, 1085–1104.
- (3) Haghghat, A. and Sonenberg, N. (1997) *J. Biol. Chem.* 272, 21677–21680.
- (4) De Gregorio, E. et al. (1998) *RNA* 4, 828–836.
- (5) Ohlmann, T. et al. (1996) *EMBO J.* 15, 1371–1382.
- (6) Borman, A.M. and Kean, K.M. (1997) *Virology* 237, 129–136.



Western blot analysis of extracts from various cell lines using eIF4G Antibody.



Confocal immunofluorescent analysis of HeLa cells, using eIF4G Antibody (green, left) compared to an isotype control (right). Actin filaments have been labeled with Alexa Fluor® 555 phalloidin (red). Blue pseudocolor = DRAQ5® #4084 (fluorescent DNA dye).

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

Entrez-Gene ID #1981
Swiss-Prot Acc. #Q04637

Storage: Supplied in 10mM HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

*Species cross-reactivity is determined by western blot.

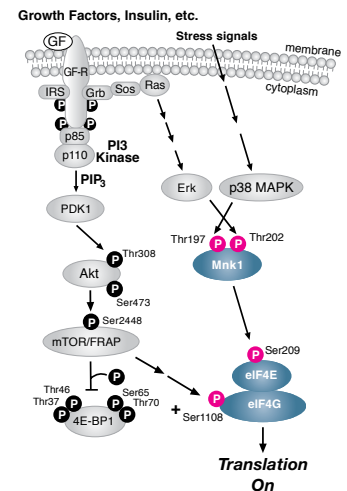
**Anti-rabbit secondary antibodies must be used to detect this antibody.

Recommended Antibody Dilutions:

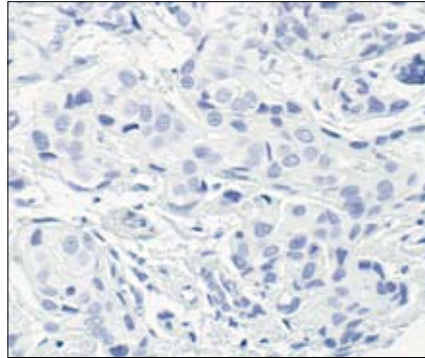
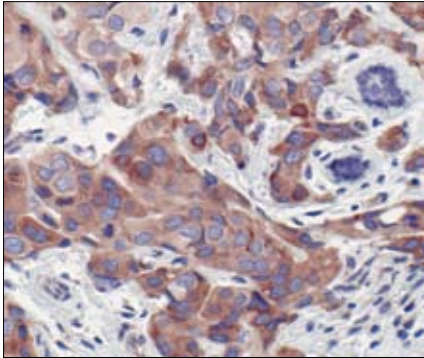
Western blotting	1:1000
Immunohistochemistry (Paraffin)	1:100
Unmasking buffer:	Citrate
Antibody diluent:	SignalStain® Antibody Diluent #8112
Immunofluorescence (IF-IC)	1:200
Flow Cytometry	1:50

For application specific protocols please see the web page for this product at www.cellsignal.com.

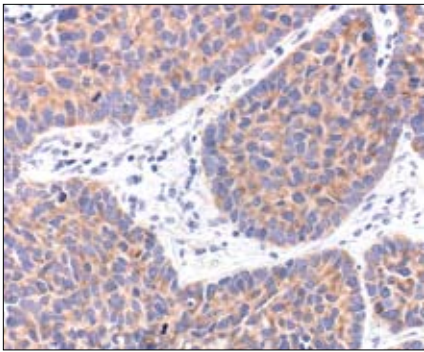
Please visit www.cellsignal.com for a complete listing of recommended companion products.



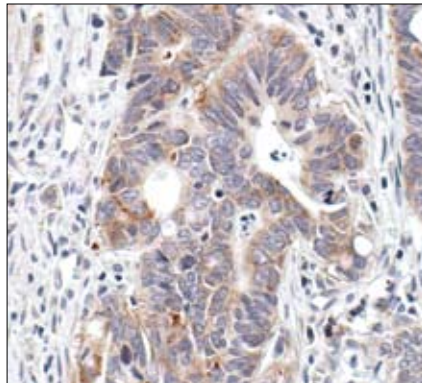
DRAQ5® is a registered trademark of Biostatus Limited.



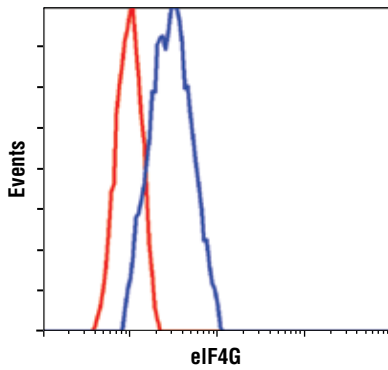
Immunohistochemical analysis of paraffin-embedded human breast carcinoma, using eIF4G Antibody in the presence of control peptide (left) or eIF4G blocking peptide #1003 (right).



Immunohistochemical analysis of paraffin-embedded human lung carcinoma, showing cytoplasmic localization, using eIF4G Antibody.



Immunohistochemical analysis of paraffin-embedded human colon carcinoma, using eIF4G Antibody.



Flow cytometric analysis of HeLa cells, using eIF4G Antibody (blue) compared to a nonspecific negative control antibody (red).