

35-1311: Polyclonal Antibody to eIF4G (phospho-Ser1231)

Clonality :	Polyclonal
Application :	WB,IHC
Reactivity :	Human
Gene :	EIF4G1
Gene ID :	1981
Uniprot ID :	Q04637
Format :	Purified
Isotype :	Rabbit IgG
Immunogen Information :	Peptide sequence around phosphorylation site of serine 1231 (P-V-S(p)-P-L) derived from Human eIF4G.

Description

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 EIF4A2, 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.

Product Info

Amount :	50 µl / 100 µl
Content :	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage condition :	Store the antibody at 4°C, stable for 6 months. For long-term storage, store at -20°C. Avoid repeated freeze and thaw cycles.

Application Note

Predicted MW: 220kd, Western blotting: 1:500~1:1000, Immunohistochemistry: 1:50~1:100

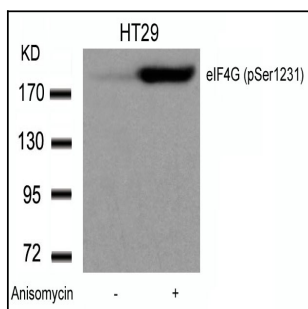


Figure 1: Western blot analysis of extracts from HT29 cells untreated or treated with Anisomycin using eIF4G (phospho-Ser1231) Antibody 35-1311 .

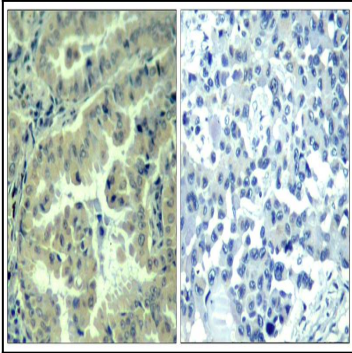


Figure 2: Immunohistochemical analysis of paraffin-embedded human lung carcinoma tissue using eIF4G (phospho-Ser1231) Antibody 35-1311 (left) or the same antibody preincubated with blocking peptide(right).