Product Datasheet

eIF4G (phospho-Ser1231) Antibody

Catalog No: #11514

Package Size: #11514-1 50ul #11514-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

Description

Product Name	eIF4G (phospho-Ser1231) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	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 chromatogramphy using non-phosphopeptide.
Applications	WB IHC
Species Reactivity	Hu
Specificity	The antibody detects endogenous level of eIF4G only when phosphorylated at serine 1231.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around phosphorylation site of serine 1231 (P-V-S(p)-P-L) derived from Human eIF4G.
Target Name	eIF4G
Modification	Phospho
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 Mg2+ and Ca2+), 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.

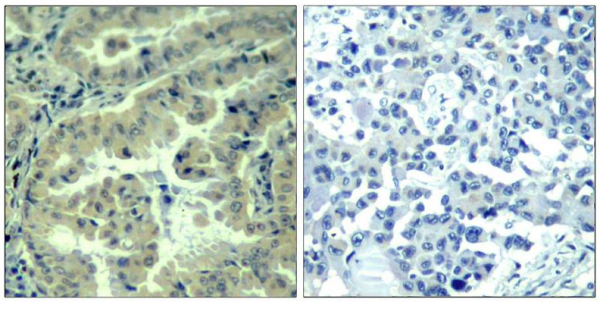
Application Details

Predicted MW: 220kd

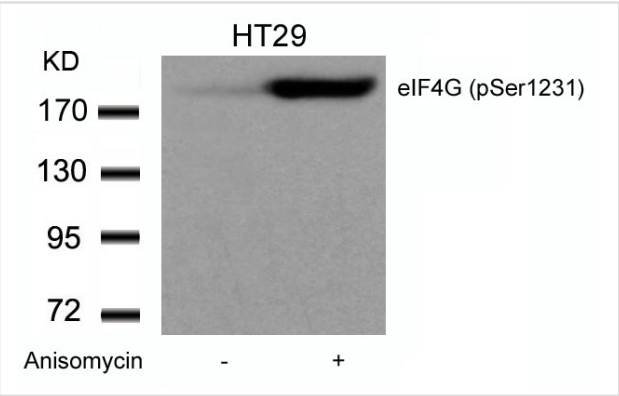
Western blotting: 1:500~1:1000

Immunohistochemistry: 1:50~1:100

Images



Immunohistochemical analysis of paraffin-embedded human lung carcinoma tissue using eIF4G (phospho-Ser1231) Antibody #11514(left) or the same antibody preincubated with blocking peptide(right).



Western blot analysis of extracts from HT29 cells untreated or treated with Anisomycin using eIF4G (phospho-Ser1231) Antibody #11514.

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 FKBPs. 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