Data Sheet (Cat.No.TMAC-01279)

Anti-Phospho-EIF4G1 (Ser1231) Polyclonal Antibody

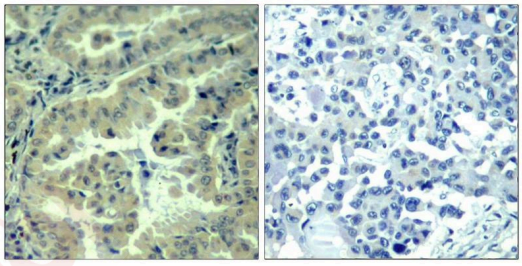
Product Details

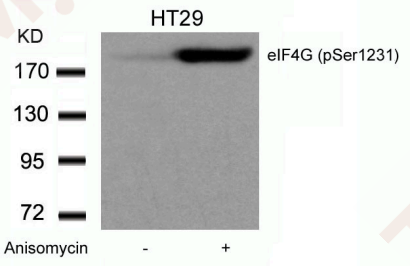
Ig Type:	IgG
Reactivity:	Human
Conjugation:	Unconjugated
Purification:	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatogramphy using non-phosphopeptide.

Applications

Verified Activity:

1. Immunohistochemical analysis of paraffin-embedded human lung carcinoma tissue using eIF4G (phospho-Ser1231) Antibody TMAC-01279 (left) or the same antibody preincubated with blocking peptide (right).
2. Western blot analysis of extracts from HT29 cells untreated or treated with Anisomycin using eIF4G (phospho-Ser1231) Antibody TMAC-01279.





Application: IHC,WB

Properties

Stability & Storage:	Store at 2°C-8°C for 1 month. Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen:	Peptide sequence around phosphorylation site of serine 1231 (P-V-S(p)-P-L) derived from Human eIF4G
Antigen Species:	human
Uniprot ID:	Q04637
Synonyms:	EIF4G1 (p-S1231);p-EIF4G1 (Ser1231);p-EIF4G1 (S1231);EIF4G1 (p-Ser1231)

Research 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

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