ARG51815
anti-eIF4G phospho (Ser1232) antibody

Package: 100 µl, 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes eIF4G phospho (Ser1232)
Tested Reactivity	Hu
Tested Application	IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	eIF4G
Species	Human
Immunogen	Peptide sequence around phosphorylation site of serine 1232 (P-V-S(p)-P-L) derived from Human eIF4G.
Conjugation	Un-conjugated
Alternate Names	EIF-4G1; eIF-4G1; Eukaryotic translation initiation factor 4 gamma 1; eIF-4G 1; PARK18; eIF-4-gamma 1; P220; p220; EIF4GI; EIF4G; EIF4F

Application Instructions

Application table

Application	Dilution
IHC-P	1:50 - 1:100
WB	1:500 - 1:1000

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

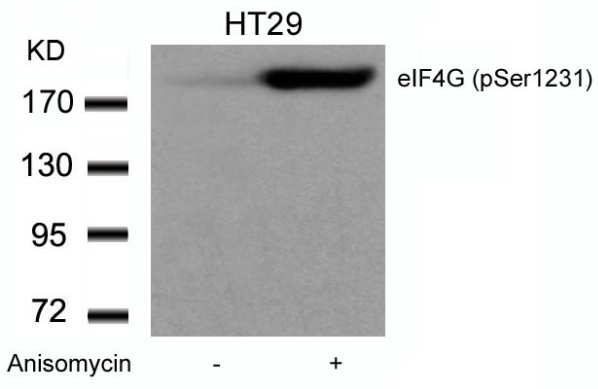
Form	Liquid
Purification	Antibodies were produced by immunizing rabbits with KLH-conjugated synthetic phosphopeptide. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. In addition, non-phospho specific antibodies were removed by chromatogramphy using non-phosphopeptide.
Buffer	PBS (without Mg2+ and Ca2+, pH 7.4), 150mM NaCl, 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

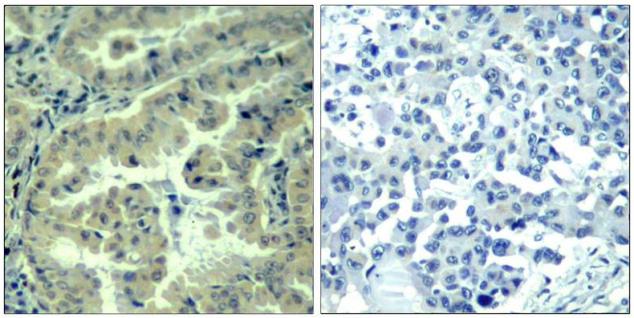
Database links	GeneID: 1981 Human Swiss-port # Q04637 Human
Gene Symbol	EIF4G1
Gene Full Name	eukaryotic translation initiation factor 4 gamma, 1
Background	eIF4F is a multi-subunit complex, the composition of which varies with external and internal environmental conditions. It is composed of at least 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
Function	Component of the protein complex eIF4F, which is involved in the recognition of the mRNA cap, ATP-dependent unwinding of 5'-terminal secondary structure and recruitment of mRNA to the ribosome. [UniProt]
Research Area	Gene Regulation antibody
Calculated Mw	175 kDa
PTM	Phosphorylated at multiple sites in vivo. Phosphorylation at Ser-1185 by PRKCA induces binding to MKNK1. Following infection by certain enteroviruses, rhinoviruses and aphthoviruses, EIF4G1 is cleaved by the viral protease 2A, or the leader protease in the case of aphthoviruses. This shuts down the capped cellular mRNA transcription.

Images



ARG51815 anti-eIF4G phospho (Ser1232) antibody WB image

Western blot: Extracts from HT29 cells untreated or treated with Anisomycin stained with ARG51815 anti-eIF4G phospho (Ser1232) antibody.



ARG51815 anti-eIF4G phospho (Ser1232) antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human lung carcinoma tissue stained with ARG51815 anti-eIF4G phospho (Ser1232) antibody (left) or the same antibody preincubated with blocking peptide (right).