

磷酸化真核翻译起始因子 4G 抗体

产品货号： mlR4003

英文名称： phospho-eIF4G (ser1185)

中文名称： 磷酸化真核翻译起始因子 4G 抗体

别名： eIF4G (phospho-Ser1185); eIF4G (phospho-S1185); p-eIF4G (Ser1185); p-eIF4G (S1185); eIF 4 gamma 1; eIF 4G 1; eIF 4G1; EIF4 gamma; EIF4F; EIF4G; EIF4GI; Eukaryotic translation initiation factor 4 gamma 1; p220; DKFZp686A1451; eIF-4-gamma 1; eIF-4G 1; eIF-4G1; EIF4G-I; IF4G1_HUMAN.

产品类型： 磷酸化抗体

研究领域： 免疫学 染色质和核信号 信号转导 转录调节因子

抗体来源： Rabbit

克隆类型： Polyclonal

交叉反应： Human, Mouse, Rat, Pig, Cow, Horse, Rabbit,

产品应用： WB=1:500-2000 ELISA=1:500-1000 IHC-P=1:400-800 IHC-F=1:400-800 IF=1:100-500 （石蜡切片需做抗原修复）

not yet tested in other applications.

optimal dilutions/concentrations should be determined by the end user.

分子量： 176kDa

细胞定位： 细胞核 细胞浆

性状： Lyophilized or Liquid

浓度： 1mg/ml

免 疫 原 : KLH conjugated Synthesised phosphopeptide derived from human eIF4G around the phosphorylation site of ser1185:KR(p-S)FS

亚 型 : IgG

纯化方法 : affinity purified by Protein A

储 存 液 : 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.

保存条件 : Store at -20 ° C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20° C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 ° C.

PubMed : PubMed

产品介绍 : Summary: The protein encoded by this gene is a component of the multi-subunit protein complex EIF4F. This complex facilitates the recruitment of mRNA to the ribosome, which is a rate-limiting step during the initiation phase of protein synthesis. The recognition of the mRNA cap and the ATP-dependent unwinding of 5'-terminal secondary structure is catalyzed by factors in this complex. The subunit encoded by this gene is a large scaffolding protein that contains binding sites for other members of the EIF4F complex. A domain at its N-terminus can also interact with the poly(A)-binding protein, which may mediate the circularization of mRNA during translation. Alternative splicing results in multiple transcript variants, some of which are derived from alternative promoter usage. [provided by RefSeq].

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.

Subunit:

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 FKBP. Interacts with EIF4E3. Interacts with CIRBP and MIF4GD. Interacts with rotavirus A NSP3; in this interaction, NSP3 takes the place of PABPC1 thereby inducing shutoff of host protein synthesis. Interacts with RBM4.

Post-translational modifications:

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.

DISEASE:

Defects in EIF4G1 are the cause of Parkinson disease type 18 (PARK18) [MIM:614251]. An autosomal dominant, late-onset form of Parkinson disease. Parkinson disease is a complex neurodegenerative disorder characterized by bradykinesia, resting tremor, muscular rigidity and postural instability, as well as by a clinically significant response to treatment with levodopa. The pathology involves the loss of dopaminergic neurons in the substantia nigra and the presence of Lewy bodies (intraneuronal accumulations of aggregated proteins), in surviving neurons in various areas of the brain.

Similarity:

Belongs to the eIF4G family.

Contains 1 MI domain.

Contains 1 MIF4G domain.

Contains 1 W2 domain.

SWISS:

Q04637

Gene ID:

1981

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.