Best Tools for immunology Research

eIF2α Polyclonal Antibody

Catalog No :	YT1507
Reactivity :	Human;Mouse;Rat;Monkey;Fish
Applications :	IF;WB;IHC;ELISA
Target :	eIF2α
Fields :	>>Autophagy - animal;>>Protein processing in endoplasmic reticulum;>>Apoptosis;>>Non-alcoholic fatty liver disease;>>Alzheimer disease;>>Parkinson disease;>>Amyotrophic lateral sclerosis;>>Prion disease;>>Pathways of neurodegeneration - multiple diseases;>>Hepatitis C;>>Measles;>>Influenza A;>>Herpes simplex virus 1 infection;>>Lipid and atherosclerosis
Gene Name :	EIF2S1
Protein Name :	Eukaryotic translation initiation factor 2 subunit 1
Human Gene Id :	1965
Human Swiss Prot No :	P05198
Mouse Gene Id :	13665
Mouse Swiss Prot No :	Q6ZWX6
Rat Gene Id :	54318
Rat Swiss Prot No :	P68101
Immunogen :	The antiserum was produced against synthesized peptide derived from human eIF2 alpha. AA range:21-70
Specificity :	eIF2α Polyclonal Antibody detects endogenous levels of eIF2α protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source :	Polyclonal, Rabbit,IgG
Dilution :	IF 1:50-200 WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:10000. Not yet tested in other applications.
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Observed Band :	38kD
Background :	The translation initiation factor EIF2 catalyzes the first regulated step of protein synthesis initiation, promoting the binding of the initiator tRNA to 40S ribosomal subunits. Binding occurs as a ternary complex of methionyl-tRNA, EIF2, and GTP. EIF2 is composed of 3 nonidentical subunits, the 36-kD EIF2-alpha subunit (EIF2S1), the 38-kD EIF2-beta subunit (EIF2S2; MIM 603908), and the 52-kD EIF2-gamma subunit (EIF2S3; MIM 300161). The rate of formation of the ternary complex is modulated by the phosphorylation state of EIF2-alpha (Ernst et al., 1987 [PubMed 2948954]).[supplied by OMIM, Feb 2010],
Function :	function:Functions in the early steps of protein synthesis by forming a ternary complex with GTP and initiator tRNA. This complex binds to a 40S ribosomal subunit, followed by mRNA binding to form a 43S preinitiation complex. Junction of the 60S ribosomal subunit to form the 80S initiation complex is preceded by hydrolysis of the GTP bound to eIF-2 and release of an eIF-2-GDP binary complex. In order for eIF-2 to recycle and catalyze another round of initiation, the GDP bound to eIF-2 must exchange with GTP by way of a reaction catalyzed by eIF-2B.,PTM:Substrate for at least 4 kinases: EIF2AK3/PERK, GCN2, HRI and PKR. Phosphorylation stabilizes the eIF-2/GDP/eIF-2B complex and prevents GDP/GTP exchange reaction, thus impairing the recycling of eIF-2 between successive rounds of initiation and leading to global inhibition of translation. In case of infection by vaccinia virus or rotavirus
Subcellular Location :	Cytoplasm, Stress granule . Colocalizes with NANOS3 in the stress granules. .
Expression :	B cells,Brain,Fibroblast,Placenta,
Sort :	1
No3 :	ab169528
No4 :	1

Host :	Rabbit
Modifications :	Unmodified

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