



Rabbit Anti-EIF-2ALPHA monoclonal antibody, clone TA12-17 (CABT-BL1355)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Target	Phospho-eIF-2a(S51)
Immunogen	Recombinant protein
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Human, Mouse, Rat
Clone	TA12-17
Purification	Protein A purified.
Conjugate	Unconjugated
Applications	WB, ICC/IF, IHC, IP, FC
Molecular Weight	36 kDa
Cellular Localization	Cytoplasmic granule
Positive Control	HUVEC, PC12, Hela, human liver tissue, mouse pancreas tissue, mouse brain tissue, mouse placenta tissue.
Format	Liquid
Size	100 µl
Buffer	1×TBS (pH7.4), 1% BSA, 40% Glycerol.

Preservative	0.05% Sodium Azide
Storage	Store at +4°C after thawing. Aliquot store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

BACKGROUND

Introduction	Phosphorylation of the eukaryotic initiation factor 2 (eIF2) α subunit is a well-documented mechanism to downregulate protein synthesis under a variety of stress conditions. Eukaryotic initiation factor 2 binds GTP and Met-tRNA ⁱ and transfers Met-tRNA to the 40S subunit to form the 43S preinitiation complex. eIF2 promotes a new round of translation initiation by exchanging GDP for GTP, a reaction catalyzed by eIF2B. Kinases that are activated by viral infection (PKR), endoplasmic reticulum stress (PERK/PEK), amino acid deprivation (GCN2), or heme deficiency (HRI) can phosphorylate the α subunit of eIF2. This phosphorylation stabilizes the eIF2-GDP-eIF2B complex and inhibits the turnover of eIF2B. Induction of PKR by IFN- γ and TNF- α induces potent phosphorylation of eIF2 α at Ser51.
Keywords	EIF 2 alpha antibody EIF 2 antibody EIF 2A antibody EIF 2alpha antibody eIF-2-alpha antibody eIF-2A antibody EIF-2alpha antibody EIF2 alpha antibody EIF2 antibody EIF2A antibody EIF2S1 antibody Eukaryotic translation initiation factor 2 subunit 1 alpha 35kDa antibody Eukaryotic translation initiation factor 2 subunit 1 alpha antibody Eukaryotic translation initiation factor 2 subunit 1 antibody Eukaryotic translation initiation factor 2 subunit alpha antibody IF2A_HUMAN antibody