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Anti-eIF2 alpha Antibody

Catalog # AP95808

Product Information

Application	WB, IHC, FC, IF/IC
Primary Accession	Q9BY44
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	64990

Additional Information

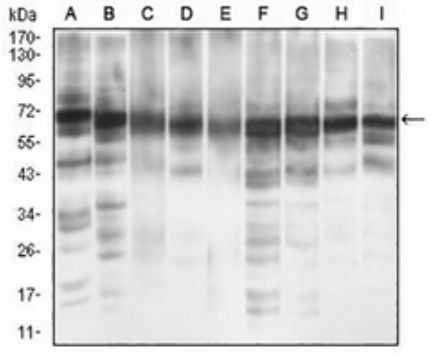
Gene ID	83939
Other Names	EukaryotIC, translation initiation factor 2A; eIF-2A; 65 kDa eukaryotIC, translation initiation factor 2A
Target/Specificity	Recombinant fusion protein of human eIF2 alpha expressed in E. Coli
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500 FC~~FC (1/100 - 1/200) IF/IC~~N/A
Format	Mouse IgG1. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

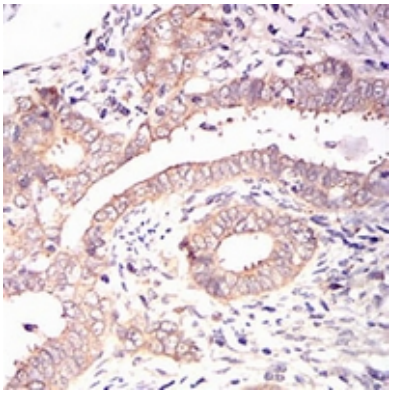
Name	EIF2A
Function	Functions in the early steps of protein synthesis of a small number of specific mRNAs. Acts by directing the binding of methionyl- tRNAi to 40S ribosomal subunits. In contrast to the eIF-2 complex, it binds methionyl-tRNAi to 40S subunits in a codon-dependent manner, whereas the eIF-2 complex binds methionyl-tRNAi to 40S subunits in a GTP-dependent manner.
Tissue Location	Widely expressed. Expressed at higher level in pancreas, heart, brain and placenta.

Images

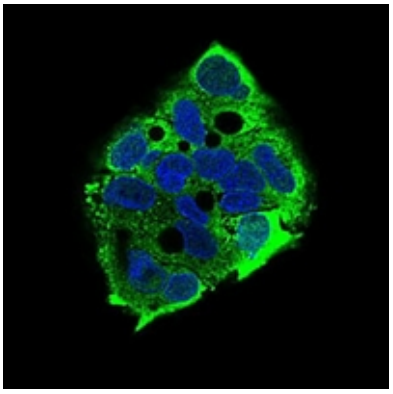
Western blot analysis of eIF2 alpha expression in MCF7 (A), PC12 (B), HepG2 (C), Hela (D), COS7 (E), K562 (F), Jurkat (G), A431 (H), NIH/3T3 (I) whole cell lysates.



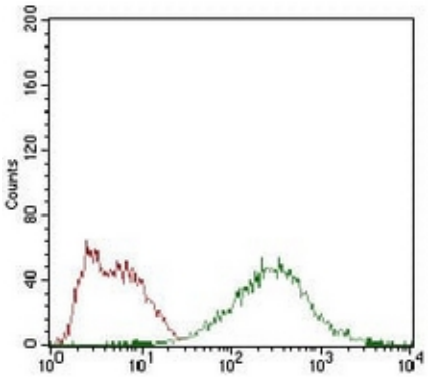
(Predicted band size: 65 kD; Observed band size: 65 kD)



Immunohistochemical analysis of eIF2 alpha staining in human cervical cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of eIF2 alpha staining in HepG2 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with an AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).



Flow cytometric analysis of HepG2 cells using Anti-eIF2 alpha Antibody (green) and negative control (red).