Mouse Monoclonal Antibody eIF2α conjugated to Sepharose Beads

CatalogNo: ANT8313-S

Size 200ul

Storage Store at 4 °C for frequent use

Description

This Antagene antibody is immobilized via covalent binding of primary amino groups to N-hydroxysuccinimide (NHS)-activated sepharose beads. It is useful for immunoprecipitation assays.

eIF2α (ANT0080R) Rabbit mAb

Formulation: 50% slurry in PBS pH 7.2 with 0.01mg NaN3a3 preservative.

Host Species	Reactivity	Applications
• Rabbit	• Human,Mouse,Rat,	• WB,IHC,IF,IP,ELISA

MW	Isotype
• 36kD (Calculated) 36kD (Observed)	• IgG,Kappa

Recommended Dilution Ratios

IP

Basic Information

Clonality	Monoclonal

Clone Number ANT0080R

Immunogen Information

Specificity Endogenous

Gene name EIF2S1

Protein Name Eukaryotic translation initiation factor 2 subunit 1

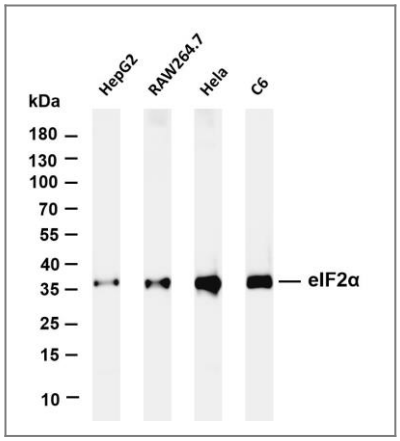
Organism	Gene ID	UniProt ID
Human	1965;	P05198;
Mouse	13665;	Q6ZWX6;
Rat	54318;	P68101;

Cellular Localization Cytoplasm

Tissue specificity B cells,Brain,Fibroblast,Placenta,

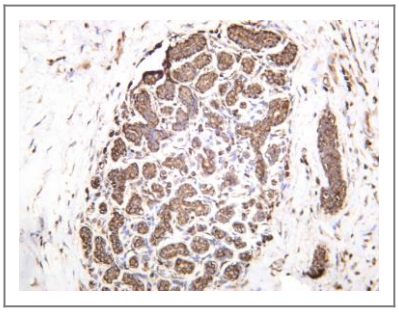
Function Function:Functions in the early steps of protein synthesis by forming a ternary complex with GTP and initiator tRNA. This complex binds to a 40S ribosomal subunit, followed by mRNA binding to form a 43S preinitiation complex. Junction of the 60S ribosomal subunit to form the 80S initiation complex 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.,ANTM: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 A, eIF2S1 phosphorylation state is modulated.,similarity:Belongs to the eIF-2-alpha family.,similarity:Contains 1 S1 motif domain.,subunit:Heterotrimer composed of an alpha, a beta and a gamma chain. Component of an EIF2 complex at least composed of CUGBP1, CALR, CALR3, EIF2S1, EIF2S2, HSP90B1 and HSPA5.,

Validation Data

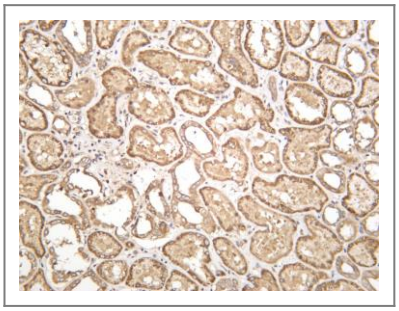


Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-eIF2α (ANT0080R) antibody. The HRPconjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: HepG2 Lane 2: RAW264.7 Lane 3: Hela Lane 4: C6

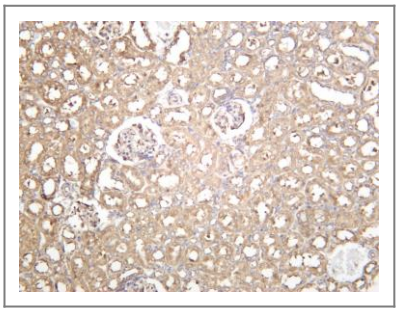
Predicted band size: 36kDa Observed band size: 36kDa



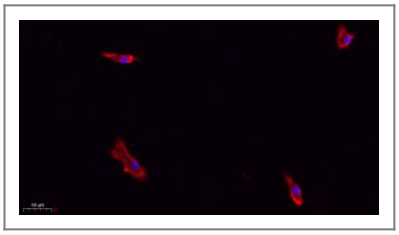
Human breast was stained with anti-eIF2α (ANT0080R) rabbit antibody



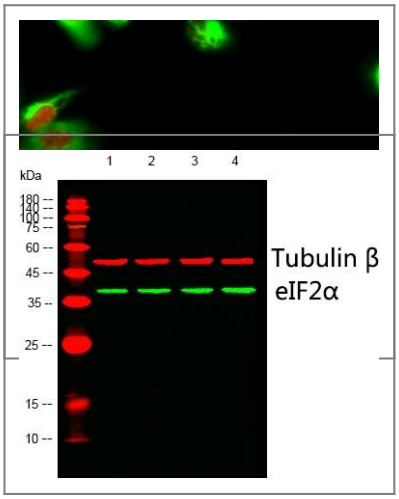
Human kidney was stained with anti-eIF2α (ANT0080R) rabbit antibody



Rat kidney was stained with anti-eIF2α (ANT0080R) rabbit antibody



Immunofluorescence analysis of A549. 1,primary Antibody(red) was diluted at 1:200(4°C overnight). 2, Goat Anti Rabbit IgG (H&L) - Alexa Fluor 594 Secondary antibody was diluted at 1:1000(room temperature, 50min).3, Picture B: DAPI(blue) 10min.



Immunofluorescence analysis of Hela cell. 1,eIF2α Antibody(red) was diluted at 1:200(4° overnight). Caspase 9 Monoclonal Antibody(3-20)(green) was diluted at 1:200(4° overnight). 2, Goat Anti Rabbit Alexa Fluor 594 Catalog:RS3611 was diluted at 1:1000(room temperature, 50min). Goat Anti Mouse Alexa Fluor 488 Catalog:RS3208 was diluted at 1:1000(room temperature, 50min).

Western blot analysis of lysates from 1) MCF-7, 2) A549, 3) K562, 4)HEK293 cells, (Green) primary antibody was diluted at 1:1000, 4°over night, Dylight 800 secondary antibody(Immunoway:RS23920)was diluted at 1:10000, 37° 1hour. (Red) Tubulin β Monoclonal Antibody(5G3) (Immunoway:YM3030) antibody was diluted at 1:5000 as loading control, 4° over night,Dylight 680 secondary antibody(Immunoway:RS23710)was diluted at 1:10000, 37°

1hour.

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