

eIF2 α (ANT0080R) Rabbit mAb

CatalogNo: ANT8313 **Recombinant** 

Formulation: PBS,50%glycerol,0.05%Proclin 300,0.05%BSA
Quantity : 100 ug/vial

Host Species

- Rabbit
- Human,Mouse,Rat,

Reactivity

- WB,IHC,IF,IP,ELISA

Applications

MW

- 36kD (Calculated)
- 36kD (Observed)

Isotype

- IgG,Kappa

Recommended Dilution Ratios

IHC 1:1000-1:5000

WB 1:2000-1:10000

IF 1:200-1:1000

ELISA 1:5000-1:20000

IP 1:50-1:200

Storage

Storage* -15°C to -25°C/1 year(Do not lower than -25°C)

Basic Information

Clonality Monoclonal

Clone Number ANT0080R

Target Information

Endogenous

Gene name EIF2S1
Protein Name Eukaryotic translation initiation factor 2 subunit 1

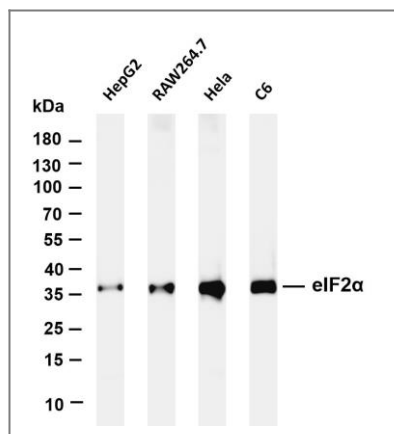
Organism	Gene ID	UniProt ID
Human	1965 ;	P05198 ;
Mouse	13665 ;	Q6ZWX6 ;
Rat	54318 ;	P68101 ;

Cellular Localization Cytoplasm

Tissue specificity B cells,Brain,Fibroblast,Placenta,

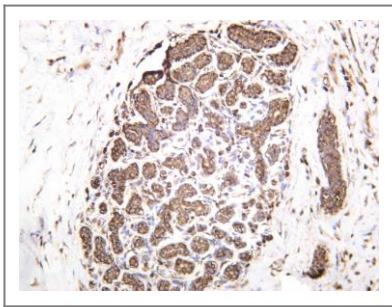
Function: Functions in the early steps of protein synthesis by forming a ternary complex with GTP and initiator tRNA. This complex binds to a 40S ribosomal subunit, followed by mRNA binding to form a 43S preinitiation complex. Junction of the 60S ribosomal subunit to form the 80S initiation complex is 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

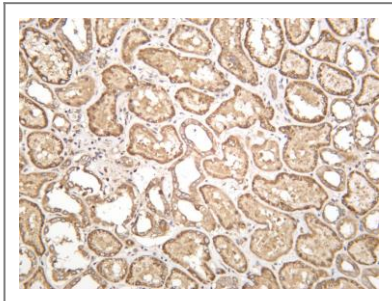


Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-eIF2 α (ANT0080R) antibody. The HRPconjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: HepG2 Lane 2: RAW264.7 Lane 3: HeLa Lane 4: C6

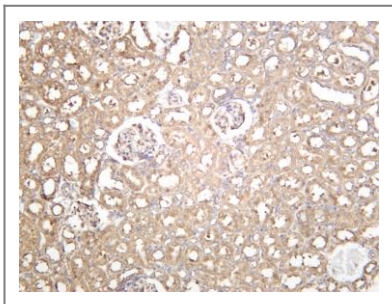
Predicted band size: 36kDa Observed band size: 36kDa



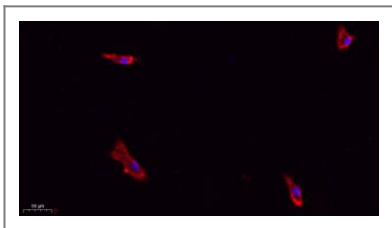
Human breast was stained with anti-eIF2 α (ANT0080R) rabbit antibody



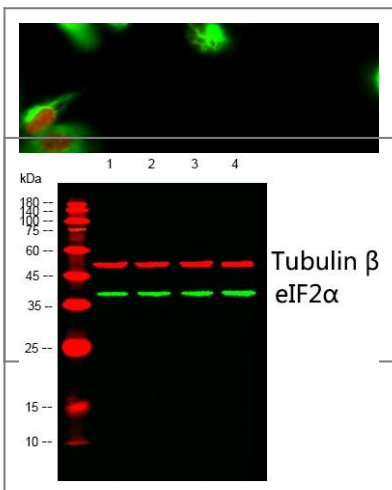
Human kidney was stained with anti-eIF2 α (ANT0080R) rabbit antibody



Rat kidney was stained with anti-eIF2 α (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, 50 min). 3, Picture B: DAPI (blue) 10 min.



Immunofluorescence analysis of HeLa cell. 1, eIF2 α Antibody (red) was diluted at 1:200 (4°C overnight). Caspase 9 Monoclonal Antibody (3-20) (green) was diluted at 1:200 (4°C overnight). 2, Goat Anti Rabbit Alexa Fluor 594 Catalog: RS3611 was diluted at 1:1000 (room temperature, 50 min). Goat Anti Mouse Alexa Fluor 488 Catalog: RS3208 was diluted at 1:1000 (room temperature, 50 min).

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°C over night, Dylight 800 secondary antibody (Immunoway: RS23920) was diluted at 1:10000, 37°C 1 hour. (Red) Tubulin β Monoclonal Antibody (5G3) (Immunoway: YM3030) antibody was diluted at 1:5000 as loading control, 4°C over night, Dylight 680 secondary antibody (Immunoway: RS23710) was diluted at 1:10000, 37°C 1 hour.

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