

Multi-rAb™ EIF2S1 Multi-Recombinant antibody

Catalog Number: RMX00004

Basic Information

Catalog Number:

RMX00004

Concentration:

1000 ug/ml

Source:

Rabbit

Isotype:

IgG

GenBank Accession Number:

BC002513

GeneID (NCBI):

1965

UNIPROT ID:

P05198

Full Name:

eukaryotic translation initiation factor 2, subunit 1 alpha, 35kDa

Calculated MW:

36 kDa

Observed MW:

36 kDa

Purification Method:

N/A

Recommended Dilutions:

WB 1:5000-1:50000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IF/ICC 1:200-1:800

Applications

Tested Applications:

WB, IF/ICC, IP, ELISA

Species Specificity:

human, mouse, rat

Positive Controls:

WB : HSC-T6 cells, mouse brain tissue, HepG2 cells, MCF-7 cells, NIH/3T3 cells, rat brain tissue

IP : HepG2 cells,

IF/ICC : HepG2 cells,

Background Information

EIF2S1 is one subunit of the translation initiation factor EIF2, which catalyzes the first regulated step of protein synthesis initiation, promoting the binding of the initiator tRNA to 40S ribosomal subunits. 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. EIF2A (Gene ID: 83939) and EIF2S1 (Gene ID: 1965) share the EIF2A symbol/alias in common. EIF2S1 is the alpha subunit of the eIF2 translation initiation complex. Although both of these proteins function in binding initiator tRNA to the 40S ribosomal subunit, the EIF2A protein does so in a codon-dependent manner, whereas eIF2 complex requires GTP.

Storage

Storage:

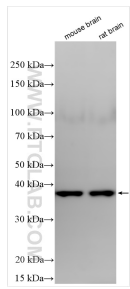
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

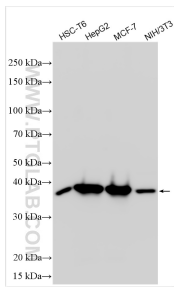
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

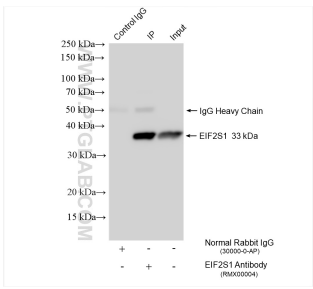
Selected Validation Data



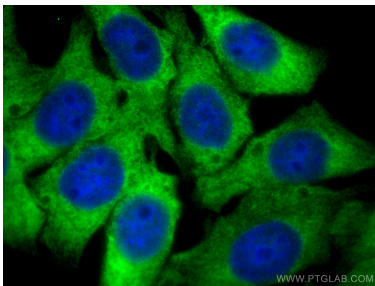
Various lysates were subjected to SDS PAGE followed by western blot with RMX00004 (EIF2S1 antibody) at dilution of 1:15000 incubated at room temperature for 1.5 hours.



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IP result of anti-EIF2S1 (IP:RMX00004, 4ug; Detection:RMX00004 1:20000) with HepG2 cells lysate 1000 ug.



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using EIF2S1 antibody (RMX00004) at dilution of 1:400 and Multi-rAb CoraLite ® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002).