

For Research Use Only

EIF2S1 Monoclonal antibody

Catalog Number: 68479-1-Ig

Featured Product

2 Publications



Basic Information

Catalog Number:

68479-1-Ig

Size:

1000 µg/ml

Source:

Mouse

Isotype:

IgG1

Immunogen Catalog Number:

AG28309

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:

Protein G purification

CloneNo.:

3C8E2

Recommended Dilutions:

WB 1:5000-1:50000

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

IF/ICC 1:400-1:1600

Applications

Tested Applications:

WB, IF/ICC, IP, ELISA

Cited Applications:

WB

Species Specificity:

Human, Mouse, Rat

Cited Species:

human, mouse

Positive Controls:

WB : A549 cells, HepG2 cells, LNCaP cells, HeLa cells, Jurkat cells, K-562 cells, HEK-293 cells, HSC-T6 cells, NIH/3T3 cells

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.

Notable Publications

Author	Pubmed ID	Journal	Application
Xiaocheng Mao	39615214	Phytomedicine	WB
Zhangqi Cao	38538250	Front Biosci (Landmark Ed)	WB

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

For technical support and original validation data for this product please contact:

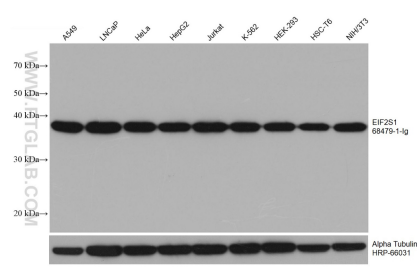
T: 4006900926

E: Proteintech-CN@ptglab.com

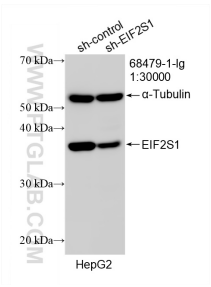
W: ptgcn.com

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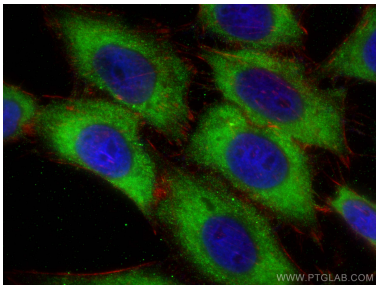
Selected Validation Data



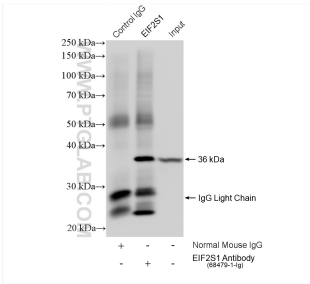
Various lysates were subjected to SDS PAGE followed by western blot with 68479-1-Ig (EIF2S1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated Alpha Tubulin Monoclonal antibody (HRP-66031) as loading control.



WB result of EIF2S1 antibody (68479-1-Ig; 1:30000; incubated at room temperature for 1.5 hours) with sh-Control and sh-EIF2S1 transfected HepG2 cells.



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using EIF2S1 antibody (68479-1-Ig, Clone: 3C8E2) at dilution of 1:800 and Coralite®488-Conjugated Goat Anti-Mouse IgG(H+L), CL594-Phalloidin (red).



IP result of anti-EIF2S1 (IP:68479-1-Ig, 4ug; Detection:68479-1-Ig 1:4000) with HepG2 cells lysate 1480 ug.