For Research Use Only

EIF2S2 Polyclonal antibody

Catalog Number:10227-1-AP Featured Product 5 Publications

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Basic Information

Catalog Number:
10227-1-AP

Size:
700 μg/ml

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG0269

GenBank Accession Number:
BC000461

GeneID (NCBI):
8894

UNIPROT ID:
P20042

Full Name:
eukaryotic translation initiation factor 2, subunit 2 beta, 38kDa

Calculated MW:
38 kDa

Observed MW:
50 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:5000-1:50000
IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
IHC 1:20-1:200
IF 1:10-1:100

Applications

Tested Applications:
IF/ICC, IHC, IP, WB, ELISA

Cited Applications:
WB

Species Specificity:
human, mouse, rat

Cited Species:
human, mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : HEK-293T cells, mouse testis tissue, mouse liver tissue, L02 cells, HeLa cells, PC-3 cells, HepG2 cells, rat liver tissue, Jurkat cells, NIH/3T3 cells, C6 cells

IP : mouse liver tissue,

IHC : human testis tissue, human liver tissue

IF : HepG2 cells, L02 cells

Background Information

Eukaryotic translation initiation factor 2 (eIF2) is composed of three subunits, eIF2 alpha, eIF2 beta (EIF2S2), and eIF2 gamma, which are present in equal molar amounts. eIF2 beta plays a central role in the maintenance of what is generally considered a rate-limiting step in mRNA translation. In the early steps of protein synthesis, eIF2 beta binds GTP and Met-tRNA and transfers Met-tRNA to the 40S ribosomal subunit. At the end of the initiation process, GTP bound to eIF2 beta is hydrolyzed to GDP and the eIF2/GDP complex is released from the ribosome. The exchange of GDP bound to eIF2 beta for GTP is a prerequisite to binding Met-tRNA and is mediated by eIF2 beta, which recycles the eIF2 complex for another round of initiation.

Notable Publications

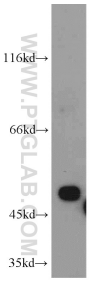
Author	Pubmed ID	Journal	Application
Genee Y Lee	24755469	Cancer Res	WB
Matthias Kroiss	19690462	Fly (Austin)	WB
M Fittschen	25721894	Neurogenetics	WB

Storage

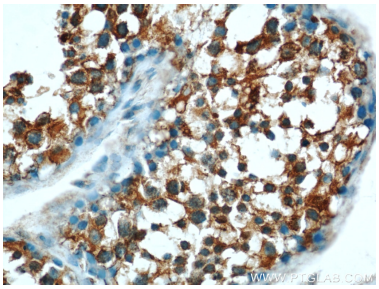
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

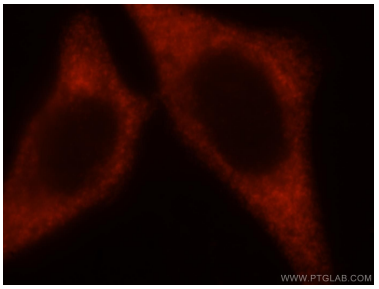
Selected Validation Data



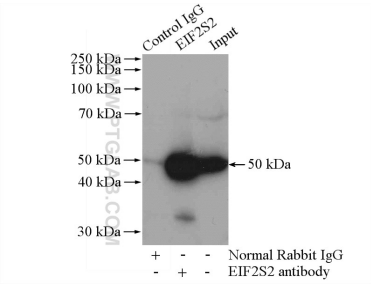
mouse liver tissue were subjected to SDS PAGE followed by western blot with 10227-1-AP (EIF2S2 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



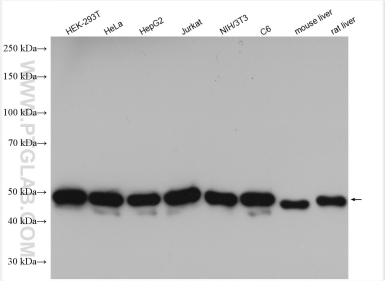
Immunohistochemical analysis of paraffin-embedded human testis using 10227-1-AP (EIF2S2 antibody) at dilution of 1:50 (under 40x lens).



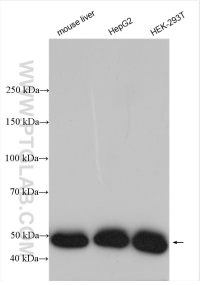
Immunofluorescent analysis of HepG2 cells, using EIF2S2 antibody 10227-1-AP at 1:25 dilution and Rhodamine-labeled goat anti-rabbit IgG (red).



IP result of anti-EIF2S2 (IP:10227-1-AP, 4ug; Detection:10227-1-AP 1:1000) with mouse liver tissue lysate 4000ug.



Various lysates were subjected to SDS PAGE followed by western blot with 10227-1-AP (EIF2S2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



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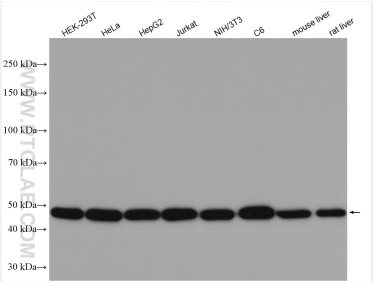

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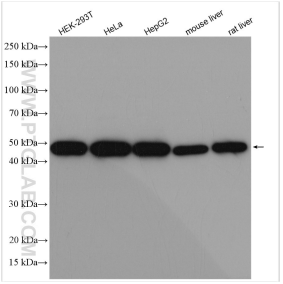

HEK-293T cells were subjected to SDS PAGE followed by western blot with 10227-1-AP (EIF2S2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.