For Research Use Only

EIF2S1 Recombinant antibody

Catalog Number:82936-8-RR



Purification Method:

CloneNo.:

230245B8

IF 1:150-1:600

Protein A purification

Recommended Dilutions: WB 1:2000-1:10000

Basic Information

Catalog Number: GenBank Accession Number:

 82936-8-RR
 BC002513

 Size:
 GeneID (NCBI):

 1000 μg/ml
 1965

 Source:
 UNIPROT ID:

 Rabbit
 P05198

Isotype: Full Name:
IgG eukaryotic translation initiation

Immunogen Catalog Number: factor 2, subunit 1 alpha, 35kDa

AG1645 Calculated MW:

36 kDa
Observed MW:
36 kDa

Applications

Tested Applications: Positive Controls:

WB : NIH/3T3 cells, HepG2 cells, MCF-7 cells, RAW

Species Specificity: 264.7 cells
Human, Mouse IF : HeLa 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

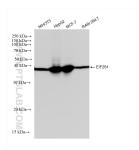
Storage:

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

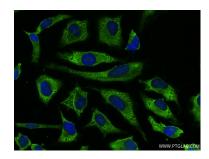
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 82936-8-RR (EIF2S1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (-20°C Ethanol) fixed Hela cells using EIF2S1 antibody (82936-8-RR, Clone: 230245B8) at dilution of 1:300 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2).

1x10^6 HeLa cells were intracellularly stained with 0.25 ug EIF2S1 Recombinant antibody (82936-8-RR, Clone:230245B8) and Coralite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2) (red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).